



\*\*FILE\*\*ID\*\*DSRLIB

D 14

DDDDDDDD SSSSSSSS RRRRRRRR LL IIIII BBBBBBBB  
DDDDDDDD SSSSSSSS RRRRRRRR LL IIIII BBBBBBBB  
DD DD SS RR RR LL IIII BB  
DD DD SSSSSS RRRRRRRR LL IIII BBBBBBBB  
DD DD SSSSSS RRRRRRRR LL IIII BBBBBBBB  
DD DD SS RR RR LL IIII BB  
DDDDDDDD SSSSSSSS RR RR LLLLLLLL IIIII BBBBBBBB  
DDDDDDDD SSSSSSSS RR RR LLLLLLLL IIIII BBBBBBBB

0001 0      Version: 'V04-000'  
0002 0  
0003 0  
0004 0  
0005 0  
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0023 0  
0024 0  
0025 0  
0026 0  
0027 0  
0028 0      \*\*  
0029 0      FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
0030 0  
0031 0      DSRLIB.REQ requires in almost all Require files used by DSR and DSRPLUS.  
0032 0      It is used to build both DSRLIB.L-- and DPLLIB.L--, which are used (via  
0033 0      a conditionalized LIBRARY statement) by almost all modules in the DSR /  
0034 0      DSRPLUS code.  
0035 0  
0036 0      The remaining REQUIRE statements in the code occur in RNFERM.BLI, which  
0037 0      requires MSGTXT.REQ, and in LP1.BLI, which requires RUNTAB.REQ.  
0038 0  
0039 0      ENVIRONMENT: Transportable BLISS  
0040 0  
0041 0      AUTHOR: Keith Dawson      CREATION DATE: March 1983  
0042 0  
0043 0      MODIFIED BY:  
0044 0  
0045 0      008      REM00008      Ray Marshall      4-June-1984  
0046 0      Added a SWITCHES declaration to cause the expansion of the  
0047 0      .REQ files.  
0048 0  
0049 0      007      KAD00007      Keith Dawson      9-May-1983  
0050 0      Remove support for .DX, .PX.  
0051 0  
0052 0      006      KAD00006      Keith Dawson      13-Apr-1983  
0053 0      Added conditionals on CREFDS, GTOKCC, KEYWORD.  
0054 0  
0055 0      005      KAD00005      Keith Dawson      7-Apr-1983  
0056 0      Added require files GTOKCC, KWTDEF (omitted by accident)  
0057 0

F 14  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 V4.0-742  
15-Sep-1984 22:50:43 \_\$255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 2  
(1)

0058 0 | 004 KAD00004 Keith Dawson 6-Apr-1983  
0059 0 | Added require files for cross-referencing (KEYWORD, CREFDS),  
0060 0 | final-output modifications (PASS).  
0061 0 |  
0062 0 | 003 RER00003 Ron Randall 04-Apr-1983  
0063 0 | For DSRPLUS: Added topnote require files (TNREC, TOPNOT).  
0064 0 |  
0065 0 | 002 KAD00002 Keith Dawson 17-Mar-1983  
0066 0 | Conditionalized 6 DSRPLUS-only Require files on the DSRPLUS  
0067 0 | variant.  
0068 0 |  
0069 0 | --

```
0070 0 LIBRARY 'NXPORT:XPORT';
0071 0
U 0072 0 %IF (%VARIANT/2) %THEN,
U 0073 0 LIBRARY 'REQ:RNODEFDPL';         ! Define /VARIANT macros
0074 0 %ELSE
0075 0 LIBRARY 'REQ:RNODEFDSR';         ! Define /VARIANT macros
0076 0 %FI
0077 0
0078 0 SWITCHES LIST (REQUIRE);         ! This declaration causes the remaining files
0079 0                                         ! to be expanded in the listing
0080 0
0081 0 ! The following files are used by some of the Require files to come.
0082 0
0083 0 REQUIRE 'REQ:MAXIMA.REQ';         ! Maximum values on some DSR / DSRPLUS parameters.
```

H 14  
15-Sep-1984 23:07:40  
15-Sep-1984 22:53:05

VAX-11 Bliss-32 v4.0-742  
\$255\$DUA28:[RUNOFF.SRC]MAXIMA.REQ;1

Page 4 (1)

R0084 0  
R0085 0 Version: 'V04-000'  
R0086 0  
R0087 0 \*\*\*\*\*  
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R0106 0 \*  
R0107 0 \*  
R0108 0 \* \*\*\*\*\*  
R0109 0  
R0110 0  
R0111 0 ++  
R0112 0 FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
R0113 0  
R0114 0 ABSTRACT:  
R0115 0 Maximum values of DSR / DSRPLUS parameters, including the  
R0116 0 maximum allowed ranges on numbers.  
R0117 0  
R0118 0 ENVIRONMENT: Transportable BLISS  
R0119 0  
R0120 0 AUTHOR: Keith Dawson  
R0121 0  
R0122 0 CREATION DATE: March 1983  
R0123 0  
R0124 0 MODIFIED BY:  
R0125 0  
R0126 0 002 KAD00002 Keith Dawson 21-Mar-1983  
R0127 0 Move xp\_string\_size from KWXYYP.REQ to MAXIMA.REQ.  
R0128 0  
R0129 0  
R0130 0 --  
R0131 0 LITERAL  
R0132 0 max\_levels = 6; !Maximum..  
R0133 0 max\_page\_ranges = 5; !header-level depth.  
R0134 0 max\_require = 10; !number of /PAGE RANGE specifications.  
R0135 0 max\_save\_depth = 20; !depth of .REQUIRE commands.  
R0136 0 max\_tabs = 40; !number of simultaneous .SAVE commands.  
R0137 0 max\_title = 450; !number of tab stops.  
R0138 0 max\_vr\_length = 15; !internal length of titles and subtitles.  
R0139 0 max\_vr\_names = 20; !length of a variable name.  
R0140 0 !number of variables.

```
R0141 0 LITERAL
R0142 0     xp_string_size = 50;      !Maximum length of SORT= or APPEND= strings.
R0143 0
R0144 0 MACRO
R0145 0     most_positive =
R0146 0         ABS (most_negative + 1) !Biggest positive number that can be represented.
R0147 0         %,
R0148 0
R0149 0     most_negative =
R0150 0         ZBLISS16(%X'8000') ZBLISS32(%X'80000000') ZBLISS36(%0'400000000000')
R0151 0         %,
R0152 0
R0153 0     most_digits =
R0154 0         ZBLISS16(5) ZBLISS32(10) ZBLISS36(11) !Maximum number of digits in a number.
R0155 0         %,
R0156 0
R0157 0     most_digits_9 =
R0158 0         !(most_digits - 1) !Maximum number of digits in a number of the form 99...
R0159 0         %;
R0160 0
R0161 0     ! End of MAXIMA.REQ
```

J 14  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 v4.0-742  
15-Sep-1984 22:50:43 \_\$255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 6 (2)

: 0162 0 REQUIRE 'REQ:BPOSIT.REQ'; ! Macro to return the bit position part of a field definition.

R0163 0 Version: 'V04-000'  
R0164 0 \*\*\*\*\*  
R0165 0 \*  
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R0186 0 \*  
R0187 0 \* \*\*\*\*\*  
R0188 0 \*  
R0189 0 \*  
R0190 0 \*  
R0191 0 \*\*  
R0192 0 \* FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
R0193 0 \*  
R0194 0 \* ABSTRACT:  
R0195 0 \* Defines a macro to return the bit position part of a field definition.  
R0196 0 \* It is intended to be used with the fields defined in LSTBTS, but is  
R0197 0 \* generally applicable.  
R0198 0 \*  
R0199 0 \* ENVIRONMENT: Transportable BLISS  
R0200 0 \*  
R0201 0 \* AUTHOR: Rich Friday  
R0202 0 \*  
R0203 0 \* CREATION DATE: 1978  
R0204 0 \*  
R0205 0 \* MODIFIED BY:  
R0206 0 \* 004 KAD00004 Keith Dawson 07-Mar-1983  
R0207 0 \* Global edit of all modules. Updated module names, idents,  
R0208 0 \* copyright dates. Changed require files to BLISS library.  
R0209 0 \*  
R0210 0 \*  
R0211 0 \*  
R0212 0 \*  
R0213 0 \* MACRO  
R0214 0 \* BPOSIT (S, C, X) = \$%;  
R0215 0 \*  
| End of BPOSIT.REQ

L 14  
15-Sep-1984 23:07:40  
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742  
\_S255\$DUA2B:[RUNOFF.SRC]DSRLIB.REQ;1 Page 8 (2)

: 0216 0 REQUIRE 'REQ:CLIST.REQ'; ! CL\_... (counted list) items

R0217 0  
R0218 0  
R0219 0  
R0220 0  
R0221 0  
R0222 0  
R0223 0  
R0224 0  
R0225 0  
R0226 0  
R0227 0  
R0228 0  
R0229 0  
R0230 0  
R0231 0  
R0232 0  
R0233 0  
R0234 0  
R0235 0  
R0236 0  
R0237 0  
R0238 0  
R0239 0  
R0240 0  
R0241 0  
R0242 0  
R0243 0  
R0244 0  
R0245 0  
R0246 0  
R0247 0  
R0248 0  
R0249 0  
R0250 0  
R0251 0  
R0252 0  
R0253 0  
R0254 0  
R0255 0  
R0256 0  
R0257 0  
R0258 0  
R0259 0  
R0260 0  
R0261 0  
R0262 0  
R0263 0  
R0264 0  
R0265 0  
R0266 0  
R0267 0  
R0268 0  
R0269 0  
R0270 0  
R0271 0  
R0272 0  
; R0273 0

Version: 'V04-000'

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++  
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:

Definitions for counted lists. A counted list carries with it its own description: current size, first and next character positions, and maximum size.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

003 KAD00003 Keith Dawson 07-Mar-1983  
Global edit of all modules. Updated module names, idents,  
copyright dates. Changed require files to BLISS library.

--  
LITERAL

CL\_DEFAULT\_SIZE = 15;

STRUCTURE

COUNTED\_LIST[I:N=CL\_DEFAULT\_SIZE] =  
[%UPVAL\*(N + 2)] ! First two elements for control information  
(COUNTED\_LIST + (1 + I)\*%UPVAL);

N 14  
15-Sep-1984 23:07:40    VAX-11 Bliss-32 V4.0-742  
15-Sep-1984 22:50:09    \$255\$DUA28:[RUNOFF.SRC]CLIST.REQ;1 Page 10  
(1)

R0274 0  
R0275 0    LITERAL  
R0276 0    CL\_MAX\_INDEX = -1.    Maximum allowable 'I' saved at start.  
R0277 0    CL\_INDEX = 0;    Current 'I'  
R0278 0  
R0279 0    !    End of CLIST.REQ

6 15  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 v4.0-742  
15-Sep-1984 22:50:43 \$255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 11  
(2)

: 0280 0 REQUIRE 'REG:LSTBTS.REQ'; ! BAR\_\_, CND\_\_, ISQ\_\_, & RIT\_\_

R0281 0  
R0282 0 Version: 'V04-000'  
R0283 0  
R0284 0  
R0285 0  
R0286 0 \*\*\*\*\*  
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R0304 0  
R0305 0 \*\*\*\*\*  
R0306 0  
R0307 0  
R0308 0 ++  
R0309 0 FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
R0310 0  
R0311 0 ABSTRACT:  
R0312 0 Defines BAR\_\_\_, CND\_\_\_, ISO\_\_\_, OSQ\_\_\_, & RIT\_\_\_.  
R0313 0  
R0314 0 ENVIRONMENT: Transportable BLISS  
R0315 0  
R0316 0 AUTHOR: Rich Friday  
R0317 0  
R0318 0 CREATION DATE: 1978  
R0319 0  
R0320 0 MODIFIED BY:  
R0321 0  
R0322 0 005 REM00005 Ray Marshall 16-May-1984  
R0323 0 Added OSQ\_\_ to support outputting of the output line number.  
R0324 0  
R0325 0 004 KAD00004 Keith Dawson 07-Mar-1983  
R0326 0 Global edit of all modules. Updated module names, idents,  
R0327 0 copyright dates. Changed require files to BLISS library.  
R0328 0  
R0329 0 --  
R0330 0  
R0331 0 MACRO  
MR0332 0 BAR\_%. = 0,1 ! TRUE if user said:  
R0333 0 ! /CHANGE  
MR0334 0 CND\_%. = 1,1 ! /DEBUG:CONDITIONALS  
R0335 0  
MR0336 0 ISO\_%. = 2,1 ! /SEQUENCE  
R0337 0

D 15  
15-Sep-1984 23:07:40    VAX-11 Bliss-32 v4.0-742  
15-Sep-1984 22:52:58    -\$255\$DUA28:[RUNOFF.SRC]LSTBTS.REQ;1 Page 13  
                              (1)

: MR0338 0      RIT -%.  
:                 = 3.1 ! /RIGHT  
: R0339 0  
: MR0340 0      OSQ -%:  
:                 = 4.1 ! /DEC\_INTERNAL=OUTPUT\_LINE\_NUMBERS

E 15  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 V4.0-742  
15-Sep-1984 22:50:43 \_\$255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 14  
(2)

: 0342 0 REQUIRE 'REQ:NBITS.REQ'; ! More "\_\_\_" bit definitions for a few flags

R0343 0  
R0344 0 Version: 'V04-000'  
R0345 0  
R0346 0  
R0347 0  
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R0365 0  
R0366 0  
R0367 0  
R0368 0  
R0369 0  
R0370 0  
R0371 0 \*\* FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
R0372 0  
R0373 0 ABSTRACT:  
R0374 0 Defines BLD\_\_\_, UND\_\_\_, BLDUND\_\_\_, OVR\_\_\_, IND\_\_\_, & HYP\_\_\_.  
R0375 0  
R0376 0 ENVIRONMENT: Transportable BLISS  
R0377 0  
R0378 0 AUTHOR: Rich Friday  
R0379 0  
R0380 0 CREATION DATE: 1978  
R0381 0  
R0382 0 MODIFIED BY:  
R0383 0  
R0384 0 004 KAD00004 Keith Dawson 07-Mar-1983  
R0385 0 Global edit of all modules. Updated module names, idents,  
R0386 0 copyright dates. Changed require files to BLISS library.  
R0387 0  
R0388 0  
R0389 0  
R0390 0  
MR0391 0 MACRO  
R0392 0 BLD\_? = 0,1 ! Bolding bit.  
MR0393 0 UND\_? = 1,1 ! Underlining bit.  
R0394 0  
MR0395 0 BLDUND\_\_ = 0,2 ! Bolding and underlining together.  
R0396 0  
MR0397 0 OVR\_? = 2,1 ! Overstrike bit.  
R0398 0  
MR0399 0 IND\_\_ = 3,1 ! Indexing bit.

6 15  
15-Sep-1984 23:07:40  
15-Sep-1984 22:53:15

VAX-11 Bliss-32 V4.0-742  
\_ \$255\$DUA28:[RUNOFF.SRC]NBITS.REQ;1 Page 16  
(1)

R0400 0  
MR0401 0  
R0402 0  
R0403 0

HYP <sup>X.</sup>  
-%; = 4,1 ! Hyphenation bit.  
End of NBITS.REQ

H 15  
15-Sep-1984 23:07:40  
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742  
\_S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 17  
(2)

: 0404 0 REQUIRE 'REQ:PAGEN.REQ'; ! SCT\_... and PAGE\_DEFINITION macros

R0405 0  
R0406 0  
R0407 0  
R0408 0  
R0409 0  
R0410 0  
R0411 0  
R0412 0  
R0413 0  
R0414 0  
R0415 0  
R0416 0  
R0417 0  
R0418 0  
R0419 0  
R0420 0  
R0421 0  
R0422 0  
R0423 0  
R0424 0  
R0425 0  
R0426 0  
R0427 0  
R0428 0  
R0429 0  
R0430 0  
R0431 0  
R0432 0  
R0433 0  
R0434 0  
R0435 0  
R0436 0  
R0437 0  
R0438 0  
R0439 0  
R0440 0  
R0441 0  
R0442 0  
R0443 0  
R0444 0  
R0445 0  
R0446 0  
R0447 0  
R0448 0  
R0449 0  
R0450 0  
R0451 0  
R0452 0  
R0453 0  
R0454 0  
R0455 0  
R0456 0  
R0457 0  
R0458 0  
R0459 0  
R0460 0  
R0461 0

Version: 'V04-000'

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++  
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:

A page number carries with it not only its current value, but also  
codes as to how those values are to be displayed when they are finally  
output. It was decided to do it this way rather than have a separate  
table so that the program TCX would have less trouble.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

004      KAD00004      Keith Dawson      07-Mar-1983  
Global edit of all modules. Updated module names, idents,  
copyright dates. Changed require files to BLISS library.

--  
LITERAL

page\_sct\_size = 4;

LITERAL

sct\_chapt      = 1.  
sct\_index      = 2.  
sct\_append      = 3;

Type of section:  
Chapter section.  
Index section.  
Appendix section.

```
R0462 0
R0463 0 LITERAL
R0464 0     sct_low    = 1;           ! Lowest section type key.
R0465 0     sct_high   = 3;           ! Highest section type key.
R0466 0
R0467 C MACRO
R0468 0     sct_typ    = 0, 0,      4,      0 %; ! Section Type (zero if none).
R0469 0     sct_page_d = 0, 4,      4,      0 %; ! Display code for page number.
R0470 0     sct_sub_page = 0, %BPVAL/2, %BPVAL/2, 0 %; ! Subpage, if any (zero if none).
R0471 0     sct_number  = 1, 0,      4,      0 %; ! Type of section number.
R0472 0     sct_page   = 2, 0,      4,      0 %; ! Page number.
R0473 0     sct_subpg_d = 3, 0,      4,      0 %; ! Display code for subpages.
R0474 0     sct_chapt_d = 3, 4,      4,      0 %; ! Display code for chapters.
R0475 0     sct_appen_d = 3, 8,      4,      0 %; ! Display code for appendices.
R0476 0     sct_index_d = 3, 12,     4,      0 %; ! Display code if indexes.
R0477 0
R0478 0 MACRO
R0479 0     sct_run_page = 3, %BPVAL/2, %BPVAL/2, 0 %; ! Running page number.
R0480 0
R0481 0 MACRO
R0482 0     page_definition = BLOCK [page_sct_size] %;
R0483 0
R0484 0 !           End of PAGEN.REQ
```

K 15  
15-Sep-1984 23:07:40  
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742  
\_S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 20  
(2)

: 0485 0      REQUIRE 'REQ:ARECCC.REQ';      ! AREC completion codes.

R0487 0  
R0488 0 Version: 'V04-000'  
R0489 0  
R0490 0  
R0491 0  
R0492 0 \*\*\*\*\*  
R0493 0 \* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY  
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R0510 0 \*  
R0511 0 \*\*\*\*\*  
R0512 0  
R0513 0  
R0514 0  
R0515 0 \*\*  
R0516 0 FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
R0517 0  
R0518 0 ABSTRACT:  
R0519 0 Completion codes returned by AREC.  
R0520 0  
R0521 0 ENVIRONMENT: Transportable BLISS  
R0522 0  
R0523 0 AUTHOR: Rich Friday  
R0524 0  
R0525 0 CREATION DATE: 1978  
R0526 0  
R0527 0  
R0528 0 MODIFIED BY:  
R0529 0 002 KAD00002 Keith Dawson 07-Mar-1983  
R0530 0 Global edit of all modules. Updated module names, idents,  
R0531 0 copyright dates. Changed require files to BLISS library.  
R0532 0  
R0533 0  
R0534 0  
R0535 0 LITERAL  
R0536 0 END\_OF\_STRING = 1, ! The uneaten string has been exhausted.  
R0537 0 CF\_BREAK = 2, ! Special form of the .BREAK command.  
R0538 0 CF\_CF = 3, ! Two adjacent <CONTROL flag>s.  
R0539 0 CF\_COMMENT = 4, ! Special form of comment (.;).  
R0540 0 CF\_LETTER = 5, ! A <CONTROL flag> followed by a letter.  
R0541 0  
R0542 0  
R0543 0

M 15  
15-Sep-1984 23:07:40  
15-Sep-1984 22:49:24

VAX-11 Bliss-32 v4.0-742  
\_S255\$DUA28:[RUNOFF.SRC]ARECCC.REQ;1 Page 22 (1)

R0544 0  
R0545 0  
R0546 0  
R0547 0  
R0548 0  
R0549 0  
R0550 0  
R0551 0  
R0552 0  
R0553 0  
R0554 0  
R0555 0  
R0556 0  
R0557 0  
R0558 0  
  
END\_FOOTNOTE = 6, ! <ENDFOOTNOTE flag>.  
FIRST\_SPACE = 7, ! A space or tab.  
FIRST\_SEMI = 8, ! A semicolon (';').  
CF\_OTHER = 9, ! <CONTROL flag> followed by something else.  
NOT\_SPACE = 10; ! None of the other cases.  
  
LITERAL ARECCC\_COUNT = 10; ! Number of completion codes returned by AREC.  
!  
End of ARECCC.REQ

N 15  
15-Sep-1984 23:07:40    VAX-11 Bliss-32 V4.0-742  
15-Sep-1984 22:50:43    \_\$255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 23  
(2)

: 0559 0    REQUIRE 'REQ:ATCODE.REQ';    ! ATABLE entry codes.

R0560 0  
R0561 0 Version: 'V04-000'  
R0562 0  
R0563 0  
R0564 0  
R0565 0 \*\*\*\*\*  
R0566 0 \* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY  
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R0583 0 \*\*\*\*\*  
R0584 0  
R0585 0  
R0586 0  
R0587 0 \*\*  
R0588 0 FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
R0589 0  
R0590 0 ABSTRACT:  
R0591 0 \* Names for the actions associated with characters in the action table.  
R0592 0  
R0593 0 ENVIRONMENT: Transportable BLISS  
R0594 0  
R0595 0 AUTHOR: Rich Friday  
R0596 0  
R0597 0 CREATION DATE: 1978  
R0598 0  
R0599 0 MODIFIED BY:  
R0600 0  
R0601 0 004 REM00004 Ray Marshall 17-November-1983  
R0602 0 \* Added macro for defining the size and type of ATABLE. Also  
R0603 0 \* defined ATABLE LENGTH for use where it's length is involved  
R0604 0 \* in other calculations.  
R0605 0  
R0606 0 003 REM00003 Ray Marshall 7-November-1983  
R0607 0 \* Added A\_U ALPHA & A\_L ALPHA as part of the added support for  
R0608 0 \* DEC multinational character set.  
R0609 0  
R0610 0 002 KAD00002 Keith Dawson 07-Mar-1983  
R0611 0 \* Global edit of all modules. Updated module names, idents,  
R0612 0 \* copyright dates. Changed require files to BLISS library.  
R0613 0  
R0614 0 !--%()  
R0615 0  
R0616 0 LITERAL ! TRUE if the character is...

```
R0617 0 A_SPACE = 01. | a space,  
R0618 0 A_TAB = 02. | a tab,  
R0619 0 A_FLAG = 03. | a flag  
R0620 0 A_CONTROL = 04. | an ASCII control character.  
R0621 0 A_U LETTER = 05. | an upper-case letter.  
R0622 0 A_L LETTER = 06. | a lower-case letter.  
R0623 0 A_DIGIT = 07. | a digit  
R0624 0 A_INT ESC = 08. | a RUNOFF internal escape character (RINTES).  
R0625 0 A_PUNCT = 09. | a punctuation mark;  
R0626 0 A_OTHER = 10. | ...or anything else not covered above.  
R0627 0 A_U_ALPHA = 11. | Uppercase multinational character  
R0628 0 A_L_ALPHA = 12. | Lowercase multinational character  
R0629 0  
R0630 0 LITERAL ACTION_COUNT = 12: ! Number of actions  
R0631 0  
R0632 0  
R0633 0 LITERAL atable_length = 256; ! Number of cells in ATABLE  
R0634 0  
R0635 0  
R0636 0 MACRO atable definition =  
MR0637 0       VECTOR [atable_length, BYTE];  
R0638 0
```

0 16  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 v4.0-742  
15-Sep-1984 22:50:43 \$255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 26  
(2)

```
: 0639 0
: U 0640 0 %IF DSRPLUS %THEN
: U 0641 0 REQUIRE 'REQ:ATTCC.REQ';
:       ! Completion codes for routines in ATTRIB
:       %FI
: 0642 0
: 0643 0
: 0644 0 REQUIRE 'REQ:BOOL.REQ';
:       ! TRUE & FALSE literals (only)
```

R0645 0  
R0646 0  
R0647 0  
R0648 0  
R0649 0  
R0650 0  
R0651 0  
R0652 0  
R0653 0  
R0654 0  
R0655 0  
R0656 0  
R0657 0  
R0658 0  
R0659 0  
R0660 0  
R0661 0  
R0662 0  
R0663 0  
R0664 0  
R0665 0  
R0666 0  
R0667 0  
R0668 0  
R0669 0  
R0670 0  
R0671 0  
R0672 0  
R0673 0  
R0674 0  
R0675 0  
R0676 0  
R0677 0  
R0678 0  
R0679 0  
R0680 0  
R0681 0  
R0682 0  
R0683 0  
R0684 0  
R0685 0  
R0686 0  
R0687 0  
R0688 0  
R0689 0  
R0690 0  
R0691 0  
R0692 0  
R0693 0  
R0694 0  
R0695 0  
R0696 0

Version: 'V04-000'

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++  
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:  
Definitions of Boolean items TRUE and FALSE.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002      Keith Dawson    07-Mar-1983  
Global edit of all modules. Updated module names, idents,  
copyright dates. Changed require files to BLISS library.

--

LITERAL

TRUE    = 1;  
FALSE   = 0;

!

End of BOOL.REQ

F 16  
15-Sep-1984 23:07:40  
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742  
\$255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1

Page 28  
(2)

: 0697 0 REQUIRE 'REQ:BRNRTY.REQ'; ! .BRN-format binary file record def's.

Version: 'V04-000'

\*\*\*\*\*

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FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:  
Binary RuNoff file record type definitions

ENVIRONMENT: Transportable BLISS

AUTHOR: J.P. Kellerman

CREATION DATE: January 1982

MODIFIED BY:

003      KAD00003      Keith Dawson      07-Mar-1983  
Global edit of all modules. Updated module names, idents,  
copyright dates. Changed require files to BLISS library.

--

File Identification Record Group

LITERAL

BRN\_FILE = -1, ! Identifies file as .BRN format  
BRN\_IDENT = 2, ! BRN format revision level  
INDEX\_FORMAT = 2, ! Index record group format revision level  
TOC\_FORMAT = 3, ! Table of contents record group format revision level  
CROSSREF\_FORMAT = 1; ! Cross reference record group format revision level

R0755 0  
R0756 0  
R0757 0 Record Group Header  
R0758 0  
R0759 0 A record group header identifies the following record group.  
R0760 0 This allows a utility program to skip record groups pertaining  
R0761 0 to other programs without having to know their structure.  
R0762 0  
R0763 0  
R0764 0 LITERAL  
R0765 0      BRN\_INDEX = 1;      ! Identifies index record groups  
R0766 0      BRN\_CONTENTS = 2;      ! Identifies table of contents record groups  
R0767 0      BRN\_CROSSREF = 3;      ! Identifies cross reference record groups  
R0768 0  
R0769 0  
R0770 0 ! Cross Reference Record groups  
R0771 0  
R0772 0  
R0773 0 LITERAL  
R0774 0      NEW\_CROSSREF = 1;      ! Identification record group  
R0775 0      CROSSREF\_REFERENCEPOINT = 2; ! Reference point record group  
R0776 0 ! End of BRNRTY.REQ

I 16  
15-Sep-1984 23:07:40  
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742  
\_S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 31  
(2)

: 0777 0 REQUIRE 'REQ:CLHCC.REQ'; ! CLH.... status return codes

J 16  
15-Sep-1984 23:07:40  
15-Sep-1984 22:49:55

VAX-11 BLISS-32 V4.0-742  
S255SDUA28:[RUNOFF.SRC]CLHCC.REQ;1

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(1)

R0778 0  
R0779 0  
R0780 0  
R0781 0  
R0782 0  
R0783 0  
R0784 0  
R0785 0  
R0786 0  
R0787 0  
R0788 0  
R0789 0  
R0790 0  
R0791 0  
R0792 0  
R0793 0  
R0794 0  
R0795 0  
R0796 0  
R0797 0  
R0798 0  
R0799 0  
R0800 0  
R0801 0  
R0802 0  
R0803 0  
R0804 0  
R0805 0  
R0806 0  
R0807 0  
R0808 0  
R0809 0  
R0810 0  
R0811 0  
R0812 0  
R0813 0  
R0814 0  
R0815 0  
R0816 0  
R0817 0  
R0818 0  
R0819 0  
R0820 0  
R0821 0  
R0822 0  
R0823 0  
R0824 0  
R0825 0  
R0826 0  
R0827 0  
R0828 0  
R0829 0  
R0830 0  
R0831 0  
R0832 0  
R0833 0  
R0834 0

Version: 'V04-000'

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++  
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:

Condition codes returned by CLH.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983  
Global edit of all modules. Updated module names, idents,  
copyright dates. Changed require files to BLISS library.

--

LITERAL  
CLH\_NORMAL = 01. ! Normal for all requests.  
CLH\_CANT\_OPEN = 02. ! For bad CLH\_OPEN\_INPUT/OUTPUT.  
CLH\_END\_FILE = 02. ! End of file for CLH\_READ\_INPUT.  
CLH\_CANT\_READ = 03. ! Bad CLH\_READ\_INPUT.  
CLH\_TOO\_LONG = 04. ! Record too long on CLH\_READ\_INPUT.

K 16  
15-Sep-1984 23:07:40    VAX-11 BLfss-32 v4.0-742  
15-Sep-1984 22:49:55    -\$255\$DUA28:[RUNOFF.SRC]CLHCC.REQ;1 Page 33  
(1)

R0835 0  
R0836 0  
R0837 0  
R0838 0  
R0839 0  
R0840 0  
R0841 0

CLH\_NO\_SPACE = 05; ! No memory available.  
LITERAL CLH\_CC\_COUNT = 05; ! Number of condition codes defined.  
! End of CLHCC.REQ

L 16  
15-Sep-1984 23:07:40    VAX-11 Bliss-32 v4.0-742  
15-Sep-1984 22:50:43    \_\$255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 34  
(2)

: 0842 0    REQUIRE 'REQ:CLHOPS.REQ':         ! CLH\_... operation codes

M 16  
15-Sep-1984 23:07:40  
15-Sep-1984 22:50:02

VAX-11 Bliss-32 V4.0-742  
\$255\$DUA28:[RUNOFF.SRC]CLHOPS.REQ;1

Page 35  
(1)

R0843 0  
R0844 0  
R0845 0  
R0846 0  
R0847 0  
R0848 0  
R0849 0  
R0850 0  
R0851 0  
R0852 0  
R0853 0  
R0854 0  
R0855 0  
R0856 0  
R0857 0  
R0858 0  
R0859 0  
R0860 0  
R0861 0  
R0862 0  
R0863 0  
R0864 0  
R0865 0  
R0866 0  
R0867 0  
R0868 0  
R0869 0  
R0870 0  
R0871 0  
R0872 0  
R0873 0  
R0874 0  
R0875 0  
R0876 0  
R0877 0  
R0878 0  
R0879 0  
R0880 0  
R0881 0  
R0882 0  
R0883 0  
R0884 0  
R0885 0  
R0886 0  
R0887 0  
R0888 0  
R0889 0  
R0890 0  
R0891 0  
R0892 0  
R0893 0  
R0894 0  
R0895 0  
R0896 0  
R0897 0  
R0898 0  
R0899 0

Version: 'V04-000'

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++  
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:  
Definition of operations that can be performed by CLH.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

006 KAD00006 Keith Dawson 07-Mar-1983  
Global edit of all modules. Updated module names, idents,  
copyright dates. Changed require files to BLISS library.

--  
LITERAL

CLH_OPEN_INPUT	= 1.	Open primary input file.
CLH_OPEN_OUT	= 2.	Open output file.
CLH_CLOSE_INPUT	= 3.	Close current input file.
CLH_CLOSE_OUT	= 4.	Close output file.
CLH_READ_INPUT	= 5.	Read a record from current input file.
CLH_WRITE_OUT	= 6.	Write a record to output file, add CRLF.
CLH_PUSH	= 7.	Save current input-file status on stack.
CLH_POP	= 8.	Get back previous input-file status.
CLH_OPEN_REQ	= 9.	Open a nested file (.REQUIRE "file-spec").

8 1  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 V4.0-742  
15-Sep-1984 22:50:02 \$255\$DUA28:[RUNOFF.SRC]CLHOPS.REQ;1 Page 36 (1)

R0900 0 CLH\_CLOSE\_REQ = 10; | Close the top-most .REQUIRE file.  
R0901 0 CLH\_OUT\_NOCRLF = 11; | Write a record, but don't add CRLF.  
R0902 0 CLH\_CLOSE\_DEL\_OUT = 12; | Close and delete output file.  
R0903 0 CLH\_OPEN\_INIT\_OUT = 13; | Open initialization file.  
R0904 0  
R0905 0 LITERAL  
R0906 0 CLH\_OPS\_COUNT = 13;  
R0907 0  
R0908 0 ! End of CLHOPS.REQ

{ 1  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 v4.0-742  
15-Sep-1984 22:50:43 \$255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 37  
(2)

; 0909 0 REQUIRE 'REQ:CONVRT.REQ'; ! TCONVRT\_... def's (string conversion codes)

R0910 0  
R0911 0 Version: "V04-000"  
R0912 0  
R0913 0 \*\*\*\*\*  
R0914 0  
R0915 0 \* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY  
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R0932 0  
R0933 0  
R0934 0 \*\*\*\*\*  
R0935 0  
R0936 0  
R0937 0 \*\*  
R0938 0 FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
R0939 0  
R0940 0 ABSTRACT:  
R0941 0 Literals defining names for how to do conversions from binary to the  
R0942 0 appropriate string type.  
R0943 0  
R0944 0 It's not possible to have a display code larger than 15 without  
R0945 0 changing the data structures defined in PAGEN.REQ.  
R0946 0  
R0947 0 OTHER NOTES:  
R0948 0 If the definitions of the literals defined here change (except for  
R0949 0 additions), look at DSPPAG to be sure nothing has been broken.  
R0950 0  
R0951 0 ENVIRONMENT: Transportable BLISS  
R0952 0  
R0953 0 AUTHOR: Rich Friday  
R0954 0  
R0955 0 CREATION DATE: 1978  
R0956 0  
R0957 0 MODIFIED BY:  
R0958 0  
R0959 0 002 KAD00002 Keith Dawson 07-Mar-1983  
R0960 0 Global edit of all modules. Updated module names, idents,  
R0961 0 copyright dates. Changed require files to BLISS library.  
R0962 0  
R0963 0  
R0964 0  
R0965 0  
R0966 0 LITERAL  
TCONVRT\_DEC\_NOZ = 0.

!Convert to decimal, no leading zeros.

E 1  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 v4.0-742  
15-Sep-1984 22:50:30 \$255\$DUA28:[RUNOFF.SRC]CONVRT.REQ;1 Page 39 (1)

R0967 0	TCONVRT_DEC_ZER = 1.	Convert to decimal, leading zeros.
R0968 0	TCONVRT LET UPP = 2.	Convert to letters, all upper-case.
R0969 0	TCONVRT LET LOW = 3.	Convert to letters, all lower-case.
R0970 0	TCONVRT LET MIX = 4.	Convert to letters, capitalize first one.
R0971 0	TCONVRT ROM UPP = 5.	Convert to roman numerals, all upper-case.
R0972 0	TCONVRT ROM LOW = 6.	Convert to roman numerals, all lower-case.
R0973 0	TCONVRT ROM MIX = 7.	Convert to roman numerals, capitalize first letter.
R0974 0	TCONVRT OCT_NOZ = 8.	Convert to octal, no leading zeros.
R0975 0	TCONVRT HEX_NOZ = 9.	Convert to hex, no leading zeros.
R0976 0		
R0977 0	LITERAL	
R0978 0	TCONVRT_LOW = 0.	Lowest total conversion code.
R0979 0	TCONVRT_HIGH = 9.	Highest total conversion code.
R0980 0		
R0981 0	!	

End of CONVRT.REQ

F 1  
15-Sep-1984 23:07:40  
15-Sep-1984 22:50:43

VAX-11 Bliss-32 v4.0-742  
\$255\$DUA2B:[RUNOFF.SRC]DSRLIB.REQ;1 Page 40 (2)

0982 0  
U 0983 0  
U 0984 0    XIF DSRPLUS %THEN  
0985 0    REQUIRE 'REQ:CREFDS.REQ';    ! Cross-referencing data structures  
0986 0    %FI  
0987 0    REQUIRE 'REQ:DIGIT.REQ';    ! Macro to test if a character is a digit

6 1  
15-Sep-1984 23:07:40  
15-Sep-1984 22:50:36

VAX-11 BLISS-32 V4.0-742  
\$255\$DUA28:[RUNOFF.SRC]DIGIT.REQ;1

Page 41 (1)

R0988 0  
R0989 0 Version: 'V04-000'  
R0990 0  
R0991 0 \*\*\*\*\*  
R0992 0 \*  
R0993 0 \* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY  
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R1009 0 \* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.  
R1010 0 \*  
R1011 0 \*  
R1012 0 \*\*\*\*\*  
R1013 0  
R1014 0  
R1015 0 \*\*  
R1016 0 FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
R1017 0  
R1018 0 ABSTRACT:  
R1019 0 Macro to test if a character is a digit.  
R1020 0  
R1021 0 ENVIRONMENT: Transportable BLISS  
R1022 0  
R1023 0 AUTHOR: Rich Friday  
R1024 0  
R1025 0 CREATION DATE: 1978  
R1026 0  
R1027 0 MODIFIED BY:  
R1028 0  
R1029 0 002 KAD00002 Keith Dawson 07-Mar-1983  
R1030 0 Global edit of all modules. Updated module names, idents,  
R1031 0 copyright dates. Changed require files to BLISS library.  
R1032 0  
R1033 0 --  
R1034 0  
R1035 0 MACRO  
MR1036 0 DIGIT(KHAR) =  
MR1037 0 (KHAR GEQ XC'0' and KHAR LEQ XC'9')  
R1038 0 ;  
R1039 0  
R1040 0 ! End of DIGIT.REQ

H 1  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 V4.0-742  
15-Sep-1984 22:50:43 \$255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 42 (2)

: 1041 0 !! REQUIRE 'REQ:DMDEFS.REQ'; : Dynamic-memory management definitions  
: 1042 0 REQUIRE 'REQ:ECC.REQ'; : Definitions for the Entity Counter/Caption Area

R1043 0  
R1044 0 Version: 'V04-000'  
R1045 0  
R1046 0 \*\*\*\*\*  
R1047 0 \*  
R1048 0 \* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY  
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R1065 0 \*  
R1066 0 \*  
R1067 0 \*\*\*\*\*  
R1068 0  
R1069 0  
R1070 0 \*\*  
R1071 0 FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
R1072 0  
R1073 0 ABSTRACT:  
R1074 0 Definitions for the ECC (Entity Counter/Caption area).  
R1075 0  
R1076 0 ENVIRONMENT: Transportable BLISS  
R1077 0  
R1078 0 AUTHOR: Keith Dawson  
R1079 0  
R1080 0 CREATION DATE: 1982  
R1081 0  
R1082 0 MODIFIED BY:  
R1083 0  
R1084 0 004 KFA00004 Ken Alden 07-Jul-1983  
R1085 0 Made the counter into a full integer.  
R1086 0  
R1087 0 003 KAD00003 Keith Dawson 07-Mar-1983  
R1088 0 Global edit of all modules. Updated module names, idents,  
R1089 0 copyright dates. Changed require files to BLISS library.  
R1090 0  
R1091 0 --  
R1092 0  
R1093 0 \$FIELD ECC\_FIELDS =  
R1094 0 SET  
R1095 0 ECC\$V\_OPTIONS = [\$SHORT\_INTEGER],  
R1096 0  
R1097 0 \$OVERLAY (ECC\$V\_OPTIONS)  
R1098 0  
R1099 0 ECC\$V\_BOLD = [\$BIT], !Make entity caption bold.

```

R1100 0      ECCSV_UNDERLINE = [$BIT].          !Underline entity caption.
R1101 0      ECCSV_UNNUMBERED=[$BIT].          !Do not display counter for this entity.
R1102 0      ECCSV_BREAK = [$BIT].            !Start a new line after entity/CHAPTER/APPENDIX.
R1103 0      ECCSV_TOCPAGE = [$BIT].           !Put a page number in the TOC.
R1104 0      ECCSV_PAGE = [$BIT].              !Start a new page before CHAPTER or APPENDIX.
R1105 0      ECCSV_STARTODD = [$BIT].          !Start this chapter/appendix on an odd-numbered page.

R1106 0      SCONTINUE

R1107 0      ECCSH_RUNIN      = [$TINY_INTEGER]. !Run in caption with text.
R1108 0      ECCSH_CASE       = [$TINY_INTEGER]. !Case rules for caption (see values below).
R1109 0      ECCSH_POSITION   = [$TINY_INTEGER]. !Placement of header (see values below).

R1110 0      ECCSH_AFTER      = [$SHORT_INTEGER]. !This many blank lines after header.
R1111 0      ECCSH_BEFORE     = [$SHORT_INTEGER]. !Skip this many lines before header.
R1112 0      ECCSH_BETWEEN    = [$SHORT_INTEGER]. !Skip this many lines between 'CHAPTER' and the title.
R1113 0      ECCSH_SPACES     = [$SHORT_INTEGER]. !Number of spaces between counter and caption.
R1114 0      ECCSH_TESTPAGE   = [$SHORT_INTEGER]. !Generate test-page for this many lines.
R1115 0      ECCSH_COUNTER    = [$INTEGER].        !Counter for this entity.
R1116 0      ECCSH_DISPLAY_DESC = [$SHORT_INTEGER]. !RUNOFF display descriptor.
R1117 0      ECCSH_PRE_LEN    = [$SHORT_INTEGER]. !Before-counter text length.
R1118 0      ECCSA_PRE_PTR    = [$POINTER].        !Before-counter text pointer.
R1119 0      ECCSH_POST_LEN   = [$SHORT_INTEGER]. !After-counter text length.
R1120 0      ECCSA_POST_PTR   = [$POINTER].        !After-counter text pointer.

R1121 0      TES:

R1122 0      LITERAL
R1123 0          ECCSK_LENGTH = $FIELD_SET_SIZE;

R1124 0      ! Values for ECCSH_CASE:
R1125 0      LITERAL
R1126 0          ECCSK_LEAVECASE = 0;           !Make entity caption initial-cap.
R1127 0          ECCSK_FIRSTCAP = 1;             !Make caption all-caps.
R1128 0          ECCSK_ALLCAP = 2;

R1129 0      ! Values for ECCSH_POSITION:
R1130 0      LITERAL
R1131 0          ECCSK_LEFT = 0;                 !Make the entity caption flush-left.
R1132 0          ECCSK_RIGHT = 1;                !Make the entity caption flush-right.
R1133 0          ECCSK_CENTER = 2;               !Center entity caption.
R1134 0          ECCSK_ALTERNATE = 3;            !(nyi) Alternate flush-left, flush-right.

R1135 0      ! Offsets of counters for example, figure, and table in the ECC structure
R1136 0      (Entity Counter / Caption area):
R1137 0      LITERAL
R1138 0          EXAMP_OFFSET = 0;               ! Examples
R1139 0          FIGUR_OFFSET = 1;              ! Figures
R1140 0          TABLE_OFFSET = 2;              ! Tables
R1141 0          HCOLL_OFFSET = 3;             ! Collecting headers
R1142 0          HL1_OFFSET = 4;               ! HL 1
R1143 0          HL2_OFFSET = 5;               ! HL 2
R1144 0          HL3_OFFSET = 6;               ! HL 3

```

K 1  
15-Sep-1984 23:07:40  
15-Sep-1984 22:50:59

VAX-11 Bliss-32 V4.0-742  
\_S255\$DUA28:[RUNOFF.SRC]ECC.REQ;1

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(1)

```
R1157 0      HL4_OFFSET    = 7;  
R1158 0      HL5_OFFSET    = 8;  
R1159 0      HL6_OFFSET    = 9;  
R1160 0      CHAP_OFFSET   = 10;  
R1161 0      APPEND_OFFSET = 11;  
R1162 0  
R1163 0      LITERAL  
R1164 0      MAX_ECC_OFFSET = 11;  
R1165 0  
R1166 0      LITERAL  
R1167 0      3 SECC_BLOCKS for example, figure, table;  
R1168 0      1 for the Header-collecting block;  
R1169 0      6 for the header levels.  
R1170 0      1 for Chapters.  
R1171 0      1 for Appendix.  
R1172 0      MAX_ECC = 3 + 1 + 6 + 1 + 1;  
R1173 0  
R1174 0      MACRO  
MR1175 0      SECC_BLOCK =  
R1176 0      BLOCK [ECC$K_LENGTH] FIELD (ECC_FIELDS) %;  
R1177 0  
R1178 0      MACRO  
MR1179 0      SECC_BLOCKVECTOR =  
R1180 0      BLOCKVECTOR [MAX_ECC, ECC$K_LENGTH] FIELD (ECC_FIELDS) %;  
R1181 0  
R1182 0      !  
                         End of ECC.REQ
```

1  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 v4.0-742  
15-Sep-1984 22:50:43 \_\$255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 46  
(2)

; 1183 0 REQUIRE 'REQ:FFDEFS.REQ'; ! FOO... opcodes and status values for FOOFILE

R1184 0  
R1185 0 Version: 'V04-000'  
R1186 0  
R1187 0 \*\*\*\*\*  
R1188 0 \*  
R1189 0 \* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY  
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R1206 0 \*  
R1207 0 \*  
R1208 0 \*\*\*\*\*  
R1209 0  
R1210 0  
R1211 0 \*\*  
R1212 0 FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
R1213 0  
R1214 0 ABSTRACT:  
R1215 0 Literals defining FOOFILE operations and return values.  
R1216 0  
R1217 0 ENVIRONMENT: Transportable BLISS  
R1218 0  
R1219 0 AUTHOR: Rich Friday  
R1220 0  
R1221 0 CREATION DATE: 1982  
R1222 0  
R1223 0 MODIFIED BY:  
R1224 0  
R1225 0 005 KAD00005 Keith Dawson 07-Mar-1983  
R1226 0 Global edit of all modules. Updated module names, idents,  
R1227 0 copyright dates. Changed require files to BLISS library.  
R1228 0  
R1229 0 --  
R1230 0  
R1231 0 LITERAL  
R1232 0 FOO\_INIT = 0. !Initialize FOOJOB.  
R1233 0 FOO\_OPIN = 1. !Open footnote file for input.  
R1234 0 FOO\_OPOU = 2. !Open footnote file for output.  
R1235 0 FOO\_READ = 3. !Read a record from footnote file.  
R1236 0 FOO\_WRIT = 4. !Write a record to the footnote file.  
R1237 0 FOO\_CLOS = 5. !Close the footnote file.  
R1238 0 FOO\_DELE = 6. !Delete the footnote file.  
R1239 0 FOO\_CLEAN= 7. !Discard footnotes that have been output.  
R1240 0 FOO\_RHDR = 8. !Read a record header.

N 1  
15-Sep-1984 23:07:40  
15-Sep-1984 22:51:04

VAX-11 Bliss-32 V4.0-742  
\_S255\$DUA28:[RUNOFF.SRC]FFDEFS.REQ;1 Page 48  
(1)

R1241 0      FOO\_PREAD= 9      !Read a "pass-through" record.  
R1242 0      FOO\_PWRIT= 10;      !Write a "pass-through" record.  
R1243 0  
R1244 0  
R1245 0      LITERAL      FFOO\_OP = 10;      !Highest operation code.  
R1246 0  
R1247 0      LITERAL      FOO\_NORMAL = 1;      !Operation done ok.  
R1248 0      FOO\_ENDFIL = 2;      !End of file on write.  
R1249 0      FOO\_BAD = 3;      !Couldn't perform operation.  
R1250 0  
R1251 0  
R1252 0      !      End of FFDEFS.REQ

B 2  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 v4.0-742 Page 49  
15-Sep-1984 22:50:43 -\$255\$DUA2B:[RUNOFF.SRC]DSRLIB.REQ;1 (2)

: 1253 0 REQUIRE 'REQ:FLGT.REQ'; ! FLAG Table items

R1254 0  
R1255 0 Version: 'V04-000'  
R1256 0  
R1257 0 \*\*\*\*\*  
R1258 0 \*  
R1259 0 \* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY  
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R1276 0 \*  
R1277 0 \*  
R1278 0 \*\*\*\*\*  
R1279 0  
R1280 0  
R1281 0 ++  
R1282 0 FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
R1283 0  
R1284 0 ABSTRACT:  
R1285 0 Flag table: values and status of flag characters.  
R1286 0  
R1287 0 ENVIRONMENT: Transportable BLISS  
R1288 0  
R1289 0 AUTHOR: Rich Friday  
R1290 0  
R1291 0 CREATION DATE: 1978  
R1292 0  
R1293 0 MODIFIED BY:  
R1294 0  
R1295 0 005 KFA00005 Ken Alden 21-Mar-1983  
R1296 0 For DSRPLUS: eliminated the passthrough flag.  
R1297 0  
R1298 0 004 KFA00004 Ken Alden 15-Mar-1983  
R1299 0 For DSRPLUS: added bits for passthrough flag.  
R1300 0  
R1301 0 003 KAD00003 Keith Dawson 07-Mar-1983  
R1302 0 Global edit of all modules. Updated module names, idents,  
R1303 0 copyright dates. Changed require files to BLISS library.  
R1304 0  
R1305 0 --

R1306 0 | In the following definitions, 3-character abbreviations are used for the  
 R1307 0 | names of the flags:

abbre- viation	flag	abbre- viation	flag
COM	Comment	BLD	Bold
SUB	Substitute	SPA	Space
EFO	Endfootnote	IND	Index
CON	Control	HYP	Hyphenate
QUO	Accept (ne Quote)	OVR	Overstrike
UPP	Uppercase	SBX	Subindex
LOW	Lowercase	PER	Period
CAP	Capitalize	BRK	Break
UND	Underline	NPX	No-permute-index

R1322 0 | LITERAL

R1323 0 | FLAG\_COUNT = 18; ! Number of flags.

R1324 0 | LITERAL

SUB_FLAG	= 0,
EFO_FLAG	= 1,
CON_FLAG	= 2,
QUO_FLAG	= 3,
UPP_FLAG	= 4,
LOW_FLAG	= 5,
CAP_FLAG	= 6,
UND_FLAG	= 7,
BLD_FLAG	= 8,
SPA_FLAG	= 9,
IND_FLAG	= 10,
HYP_FLAG	= 11,
OVR_FLAG	= 12,
SBX_FLAG	= 13,
COM_FLAG	= 14,
PER_FLAG	= 15,
BRK_FLAG	= 16,
NPX_FLAG	= 17;

R1345 0 | LITERAL

R1346 0 | FLAG\_ENABLED = 0,  
 R1347 0 | FLAG\_CHARACTER = 1;

R1349 0 | The FLAG\_TABLE structure does not need to use %UPVAL to be on -11s and VAX,  
 R1350 0 | because the information there can be saved in single bytes.  
 R1351 0 | STRUCTURE

```
FLAG_TABLE[I,J:N=FLAG_COUNT] =
[2 * N * %UPVAL]
(If J eq1 FLAG_ENABLED
then FLAG_TABLE + (I * %UPVAL)
else FLAG_TABLE + ( FLAG_COUNT + 1)*%UPVAL );
```

R1358 0 | MACRO

```
FLGT_DEFINITION =
FLAG_TABLE[FLAG_COUNT];
```

MR1360 0 |
 R1361 0 |
 R1362 0 |

E 2  
15-Sep-1984 23:07:40    VAX-11 Bliss-32 V4.0-742  
15-Sep-1984 22:51:14    \_\$255\$DUA28:[RUNOFF.SRC]FLGT.REQ;1    Page 52  
(2)

; R1363 0 !

End of FLGT.REQ

F 2  
12-Sep-1984 23:07:40    VAX-11 BL:SS-32 V4.0-742  
15-Sep-1984 22:50:43    \_\$255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 53  
(2)

: 1364 0    REQUIRE 'REQ:FLIPCHARS.REQ';    ! FLIPSK\_... special characters

R1365 0  
R1366 0  
R1367 0  
R1368 0  
R1369 0  
R1370 0  
R1371 0  
R1372 0  
R1373 0  
R1374 0  
R1375 0  
R1376 0  
R1377 0  
R1378 0  
R1379 0  
R1380 0  
R1381 0  
R1382 0  
R1383 0  
R1384 0  
R1385 0  
R1386 0  
R1387 0  
R1388 0  
R1389 0  
R1390 0  
R1391 0  
R1392 0  
R1393 0  
R1394 0  
R1395 0  
R1396 0  
R1397 0  
R1398 0  
R1399 0  
R1400 0  
R1401 0  
R1402 0  
R1403 0  
R1404 0  
R1405 0  
R1406 0  
R1407 0  
R1408 0  
R1409 0  
R1410 0  
R1411 0  
R1412 0  
R1413 0  
R1414 0  
R1415 0  
R1416 0  
R1417 0  
R1418 0  
R1419 0  
R1420 0  
R1421 0

Version: 'V04-000'

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FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:

This file contains the definitions of the FLIP special text characters.

ENVIRONMENT: Transportable BLISS

AUTHOR: George Hetrick

CREATION DATE: 19-Feb-1982

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983  
Global edit of all modules. Updated module names, idents,  
copyright dates. Changed require files to BLISS library.

--  
\* FLIP special characters, inserted into output file

SLITERAL

FLIPSK\_START\_BOLD = \$DISTINCT,  
FLIPSK\_START\_UNDERLINE = \$DISTINCT,  
FLIPSK\_END\_BOLD = \$DISTINCT,  
FLIPSK\_END\_UNDERLINE = \$DISTINCT;

H 2  
15-Sep-1984 23:07:40  
15-Sep-1984 22:51:21

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[RUNOFF.SRC]FLIPCHARS.REQ;1

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(1)

: R1422 0 !

End of FLIPCHARS.REQ

I 2  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 v4.0-742  
15-Sep-1984 22:50:43 \_\$255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 56  
(2)

: 1423 0 REQUIRE 'REQ:FLIPRECS.REQ'; ! FLIP macro, record, & field definitions and MAX\_LEVELS.

R1424 0  
R1425 0  
R1426 0  
R1427 0  
R1428 0  
R1429 0  
R1430 0  
R1431 0  
R1432 0  
R1433 0  
R1434 0  
R1435 0  
R1436 0  
R1437 0  
R1438 0  
R1439 0  
R1440 0  
R1441 0  
R1442 0  
R1443 0  
R1444 0  
R1445 0  
R1446 0  
R1447 0  
R1448 0  
R1449 0  
R1450 0  
R1451 0  
R1452 0  
R1453 0  
R1454 0  
R1455 0  
R1456 0  
R1457 0  
R1458 0  
R1459 0  
R1460 0  
R1461 0  
R1462 0  
R1463 0  
R1464 0  
R1465 0  
R1466 0  
R1467 0  
R1468 0  
R1469 0  
R1470 0  
R1471 0  
R1472 0  
R1473 0  
R1474 0  
R1475 0  
R1476 0  
R1477 0  
R1478 0  
R1479 0  
R1480 0  
  
TITLE 'FLIPRECS -- FLIP/RUNOFF record formats'

Version: 'V04-000'

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\*\*  
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

## ABSTRACT:

This file documents the records emitted by RUNOFF for processing by FLIP.

## ENVIRONMENT:

DSRPLUS

AUTHOR: George C. Hetrick

CREATION DATE: 1981

## MODIFIED BY:

003 KAD00003 Keith Dawson 17-May-1983  
Made all - CODEs [STINY INTEGER]'s again. The reason for  
having changed to [\$INTEGER]'s in the first place has gone  
away: FLIP code is now more tightly conditionalized (for  
the benefit of TOPS-20 mainly).

002 KAD00002 Keith Dawson 07-Mar-1983  
Global edit of all modules. Updated module names, idents,  
copyright dates. Changed require files to BLISS library.

--

!sbttl 'FLIP/RUNOFF record types':

FLIPRECS -- FLIP/RUNOFF record formats  
FLIP/RUNOFF record types

E 2  
15-Sep-1984 23:07:40  
15-Sep-1984 22:51:29

VAX-11 Bliss-32 V4.0-742  
\_S255\$DUA28:[RUNOFF.SRC]FLIPRECS.REQ,1 Page 58 (1)

R1481 0  
R1482 0  
R1483 0  
R1484 0  
R1485 0  
R1486 0  
R1487 0  
R1488 0  
R1489 0  
R1490 0  
R1491 0  
R1492 0  
R1493 0  
R1494 0  
R1495 0

SLITERAL  
FLIPSK\_INIT = \$DISTINCT,  
FLIPSK\_RNOTXT = \$DISTINCT,  
FLIPSK\_TCXTXT = \$DISTINCT,  
FLIPSK\_TCXXTN = \$DISTINCT,  
FLIPSK\_TCXINI = \$DISTINCT,  
FLIPSK\_TOCRD = \$DISTINCT,  
FLIPSK\_TOCTXT = \$DISTINCT,  
FLIPSK\_TOCPAG = \$DISTINCT,  
FLIPSK\_TOCHLI = \$DISTINCT,  
FLIPSK\_TOCHL = \$DISTINCT,  
FLIPSK\_NEWPAG = \$DISTINCT;

LITERAL  
FLIPSK\_VERSION = 1;

FLIPRECS -- FLIP/RUNOFF record formats  
INIT -- initial FLIP record

L 2  
15-Sep-1984 23:07:40  
15-Sep-1984 22:51:29

VAX-11 Bliss-32 V4.0-762  
\_S255\$DUA28:[RUNOFF.SRC]FLIPRECS.REQ;1

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(2)

```
R1496 0
R1497 0
R1498 0
R1499 0
R1500 0
R1501 0
R1502 0
R1503 0
R1504 0
R1505 0
R1506 0
R1507 0
R1508 0
R1509 0
R1510 0
R1511 0
R1512 0
R1513 0
R1514 0

    %sbttl 'INIT -- initial FLIP record';

    $FIELD
        $FLIPSINIT_FIELDS = SET
        INIT_CODE      = [$TINY_INTEGER],      ! record type
        INIT_FLAGS     = [$BYTE],             ! various flags
        $OVERLAY(INIT_FLAGS)
        INIT_CONTENTS  = [$BIT],              ! was /CONTENTS specified
        $CONTINUE
        INIT_LEVEL     = [$SHORT_INTEGER]     ! FLIP version
    TES:
    LITERAL
        FLIPSK_INIT_LENGTH = $FIELD_SET_SIZE,
        FLIPSK_INIT_SIZE   = %UPVAL*$FIELD_SET_SIZE; ! Size in FULLWORDS
    ! Size in UNITS
    MACRO
        $FLIP_INIT = BLOCK[FLIPSK_INIT_LENGTH] FIELD($FLIPSINIT_FIELDS)%;
```

FLIPRECS -- FLIP/RUNOFF record formats  
RNOTXT -- text record

M 2  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 v4.0-742  
15-Sep-1984 22:51:29 \_\$255\$DUA28:[RUNOFF.SRC]FLIPRECS.REQ;1 Page 60  
(3)

```
R1515 0 %sbttl 'RNOTXT -- text record';  
R1516 0  
R1517 0  
R1518 0 $FIELD  
      $FLIP$RNOTXT_FIELDS1= SET  
      RNOTXT_CODE = [$TINY_INTEGER]  
      RNOTXT_LENGTH = [$SHORT_INTEGER]    ! record type  
      TES:  
R1522 0  
R1523 0 LITERAL  
      FLIP$K_RNOTXT_BASELEN = $FIELD_SET_SIZE, ! Size in FULLWORDS  
      FLIP$K_RNOTXT_BASESIZ = %UPVAL*$FIELD_SET_SIZE; ! Size in UNITS  
R1527 0  
R1528 0  
R1529 0 $FIELD  
      $FLIP$RNOTXT_FIELDS2= SET  
      RNOTXT_FILLER = [$SUB_BLOCK(FLIP$K_RNOTXT_BASELEN)],  
      RNOTXT_TEXT = [$SUB_BLOCK(1000)] ! TEXT segment  
      TES:  
R1534 0  
R1535 0 LITERAL  
      FLIP$K_RNOTXT_LENGTH = $FIELD_SET_SIZE, ! Size in FULLWORDS  
      FLIP$K_RNOTXT_SIZE = %UPVAL*$FIELD_SET_SIZE; ! Size in UNITS  
R1539 0 MACRO  
      $FLIP_RNOTXT = BLOCK[FLIP$K_RNOTXT_LENGTH] FIELD($FLIP$RNOTXT_FIELDS1,  
          $FLIP$RNOTXT_FIELDS2)%;
```

FLIPRECS -- FLIP/RUNOFF record formats  
TOCTXT -- TOC text record

N 2  
15-Sep-1984 23:07:40  
15-Sep-1984 22:51:29  
VAX-11 Bliss-32 V4.0-742  
-\$255\$DUA28:[RUNOFF.SRC]FLIPRECS.REQ;1 Page 61 (4)

```
R1543 0
R1544 0
R1545 0
R1546 0
R1547 0
R1548 0
R1549 0
R1550 0
R1551 0
R1552 0
R1553 0
R1554 0
R1555 0
R1556 0
R1557 0
R1558 0
R1559 0
R1560 0
R1561 0
R1562 0
R1563 0
R1564 0
R1565 0
R1566 0
R1567 0
R1568 0
R1569 0
MR1570 0
R1571 0
R1572 0

%sbttl 'TOCTXT -- TOC text record';

$FIELD
$FLIP$TOCTXT_FIELDS1= SET
    TOCTXT_CODE      = [STINY_INTEGER],           ! record type
    TOCTXT_MAJOR     = [STINY_INTEGER],           ! major code
    TOCTXT_MINOR     = [STINY_INTEGER],           ! minor code
    TOCTXT_LENGTH    = [SINTEGER]                 ! length of data portion
TES;

LITERAL
FLIPSK_TOCTXT_BASELEN = $FIELD_SET_SIZE,        ! Size in FULLWORDS
FLIPSK_TOCTXT_BASESIZ = %UPVAL*$FIELD_SET_SIZE; ! Size in UNITS

$FIELD
$FLIP$TOCTXT_FIELDS2= SET
    TOCTXT_FILLER   = [$SUB_BLOCK(FLIPSK_TOCTXT_BASELEN)],
    TOCTXT_TEXT     = [$SUB_BLOCK(1000)]           ! TEXT segment
TES;

LITERAL
FLIPSK_TOCTXT_LENGTH = $FIELD_SET_SIZE,          ! Size in FULLWORDS
FLIPSK_TOCTXT_SIZE   = %UPVAL*$FIELD_SET_SIZE; ! Size in UNITS

MACRO
$FLIP_TOCTXT = BLOCK[FLIPSK_TOCTXT_LENGTH] FIELD($FLIP$TOCTXT_FIELDS1,
$FLIP$TOCTXT_FIELDS2)%;
```

FLIPRECS -- FLIP/RUNOFF record formats  
TOCRD -- TOC descriptor

8 3  
15-Sep-1984 23:07:40  
15-Sep-1984 22:51:29

VAX-11 Bliss-32 V4.0-742  
\$255\$DUA28:[RUNOFF.SRC]FLIPRECS.REQ;1

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(5)

```
R1573 0
R1574 0
R1575 0
R1576 0
R1577 0
R1578 0
R1579 0
R1580 0
R1581 0
R1582 0
R1583 0
R1584 0
R1585 0
R1586 0
R1587 0
R1588 0

: R1573 0
: R1574 0
: R1575 0
: R1576 0
: R1577 0
: R1578 0
: R1579 0
: R1580 0
: R1581 0
: R1582 0
: R1583 0
: R1584 0
: R1585 0
: R1586 0
: R1587 0
: R1588 0

    %sbttl 'TOCRD -- TOC descriptor';

    $FIELD
        $FLIP$TOCRD_FIELDS = SET
        TOCRD_CODE      = [$TINY_INTEGER],           ! record type
        TOCRD_MAJOR     = [$INTEGER],                ! major code
        TOCRD_MINOR     = [$INTEGER]                 ! minor code

    TES;

    LITERAL
        FLIPSK_TOCRD_LENGTH = $FIELD_SET_SIZE,      ! Size in FULLWORDS
        FLIPSK_TOCRD_SIZE   = %UPVAL*$FIELD_SET_SIZE; ! Size in UNITS

    MACRO
        $FLIP_TOCRD = BLOCK[FLIPSK_TOCRD_LENGTH] FIELD($FLIP$TOCRD_FIELDS)%;
```

FLIPRECS -- FLIP/RUNOFF record formats  
TOCPAG -- TOC page record

{ 3  
15-Sep-1984 23:07:40  
15-Sep-1984 22:51:29

VAX-11 Bliss-32 V4.0-742  
\$\_255\$DUA28:[RUNOFF.SRC]FLIPRECS.REQ;1

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(6)

```
R1589 0 %sbttl 'TOCPAG -- TOC page record';
R1590 0
R1591 0 $FIELD
R1592 0   $FLIP$TOCPAG_FIELDS = SET
R1593 0     TOCPAG_CODE    = [$TINY_INTEGER],           ! record type
R1594 0     TOCPAG_PAGENO = [$SUB_BLOCK(PAGE_SCT_SIZE)]      ! page number segment
R1595 0
R1596 0   TES;
R1597 0
R1598 0 LITERAL
R1599 0   FLIPSK_TOCPAG_LENGTH = $FIELD_SET_SIZE,          ! Size in FULLWORDS
R1600 0   FLIPSK_TOCPAG_SIZE = %UPVAL*$FIELD_SET_SIZE; ! Size in UNITS
R1601 0
R1602 0 MACRO
R1603 0   $FLIP_TOCPAG = BLOCK[FLIPSK_TOCPAG_LENGTH] FIELD($FLIP$TOCPAG_FIELDS)%;
R1604 0
R1605 0
```

```
: R1606 0    %sbttl 'TCXXTN -- index';
: R1607 0
: R1608 0
: R1609 0    $FIELD
: R1610 0      TCXXTN_CODE = [%TINY_INTEGER],      ! record type
: R1611 0          SALIGN(FULLWORD)
: R1612 0      TCXXTN_XTN = [%INTEGER],           ! transaction type
: R1613 0      TCXXTN_SCT = [%SUB_BLOCK(PAGE_SCT_SIZE)] ! page number segment
: R1614 0
: R1615 0      TES;
: R1616 0
: R1617 0      LITERAL
: R1618 0          FLIPSK_TCXXTN_LENGTH = $FIELD_SET_SIZE, ! Size in FULLWORDS
: R1619 0          FLIPSK_TCXXTN_SIZE = %UPVAL*$FIELD_SET_SIZE;! Size in UNITS
: R1620 0
: R1621 0      MACRO
: R1622 0          $FLIP_TCXXTN = BLOCK[FLIPSK_TCXXTN_LENGTH] FIELD($FIELD_TCXXTN_FIELDS)%;
: R1623 0
: R1624 0
```

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHLI -- TOC header level info record

E 3  
15-Sep-1984 23:07:40  
15-Sep-1984 22:51:29

VAX-11 Blfss-32 V4.0-742  
\$255\$DUA2B:[RUNOFF.SRC]FLIPRECS.REQ;1

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(8)

```
R1625 0 %sbttl 'TOCHLI -- TOC header level info record';
R1626 0
R1627 0
R1628 0
R1629 0
R1630 0
R1631 0
R1632 0
R1633 0
R1634 0
R1635 0
R1636 0
R1637 0
R1638 0
R1639 0
R1640 0
R1641 0

SFIELD
  $FLIPSTOCHLI_FIELDS = SET
    TOCHLI_CODE      = [$TINY_INTEGER],           ! record type
    TOCHLI_HLLIST   = [$SUB_BLOCK(2+MAX_LEVELS)], ! header level info
    TOCHLI_HLDSP     = [$SUB_BLOCK(MAX_LEVELS)], ! header level display info

  TES:

LITERAL
  FLIPSK_TOCHLI_LENGTH = SFIELD_SET_SIZE,        ! Size in FULLWORDS
  FLIPSK_TOCHLI_SIZE   = %UPVAL*SFIELD_SET_SIZE; ! Size in UNITS

MACRO
  $FLIP_TOCHLI = BLOCK[FLIPSK_TOCHLI_LENGTH] FIELD($FLIPSTOCHLI_FIELDS);
```

FLIPRECS -- FLIP/RUNOFF record formats  
TCXINI -- Index Header record

F 3  
15-Sep-1984 23:07:40  
15-Sep-1984 22:51:29

VAX-11 Bliss-32 V4.0-742  
\_S255SDUA28:[RUNOFF.SRC]FLIPRECS.REQ;1

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(9)

```
R1642 0 %sbttl 'TCXINI -- Index Header record';
R1643 0
R1644 0
R1645 0 $FIELD
R1646 0   $FLIP$TCXINI_FIELDS = SET
R1647 0     TCXINI_CODE    = [$TINY_INTEGER],      ! record type
R1648 0     TCXINI_HEADER  = [$INTEGER]           ! TCX format indicator
R1649 0     TES;
R1650 0
R1651 0 LITERAL
R1652 0   FLIP$K_TCXINI_LENGTH = $FIELD_SET_SIZE, ! Size in FULLWORDS
R1653 0   FLIP$K_TCXINI_SIZE = %UPVAL*$FIELD_SET_SIZE;! Size in UNITS
R1654 0
R1655 0 MACRO
R1656 0   $FLIP_TCXINI = BLOCK[FLIP$K_TCXINI_LENGTH] FIELD($FLIP$TCXINI_FIELDS)%;
```

FLIPRECS -- FLIP/RUNOFF record formats  
TCXTXT -- Index TEXT record

6 3  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 V4.0-742  
15-Sep-1984 22:51:29 \_\$255\$DUA28:[RUNOFF.SRC]FLIPRECS.REQ;1 (10)  
Page 67

```
R1657 0 %sbttl 'TCXTXT -- Index TEXT record';  
R1658 0  
R1659 0 $FIELD  
R1660 0   $FLIP$TCXTXT_FIELDS1 = SET  
R1661 0     TCXTXT_CODE      = [$TINY_INTEGER],           ! record type  
R1662 0     SALIGN(FULLWORD)  
R1663 0     TCXTXT_ENTRY    = [$INTEGER],  
R1664 0     TCXTXT_LENGTH   = [$INTEGER],           ! length of data  
R1665 0     TCXTXT_XTN     = [$INTEGER],           ! transaction number  
R1666 0     TCXTXT_BAR     = [$INTEGER]            ! change bar flag  
R1667 0 TES:  
R1668 0  
R1669 0 LITERAL  
R1670 0   FLIPSK_TCXTXT_BASELEN = $FIELD_SET_SIZE, ! Size in FULLWORDS  
R1671 0   FLIPSK_TCXTXT_BASESIZ = %UPVAL*$FIELD_SET_SIZE;! Size in UNITS  
R1672 0  
R1673 0 $FIELD  
R1674 0   $FLIP$TCXTXT_FIELDS2 = SET  
R1675 0     TCXTXT_DUMMY    = [$SUB_BLOCK(FLIPSK_TCXTXT_BASELEN)],  
R1676 0     TCXTXT_TEXT     = [$SUB_BLOCK(1000)]           ! text of entry  
R1677 0 TES:  
R1678 0  
R1679 0 LITERAL  
R1680 0   FLIPSK_TCXTXT_LENGTH = $FIELD_SET_SIZE, ! Size in FULLWORDS  
R1681 0   FLIPSK_TCXTXT_SIZE = %UPVAL*$FIELD_SET_SIZE;! Size in UNITS  
R1682 0  
R1683 0 MACRO  
MR1684 0   $FLIP_TCXTXT = BLOCK[FLIPSK_TCXTXT_LENGTH] FIELD($FLIP$TCXTXT_FIELDS1,  
R1685 0         $FLIP$TCXTXT_FIELDS2)%;
```

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

H 3  
15-Sep-1984 23:07:40  
15-Sep-1984 22:51:29

VAX-11 Bliss-32 V4.0-742  
\_S255\$DUA28:[RUNOFF.SRC]FLIPRECS.REQ;1

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(11)

```
R1686 0 %sbttl 'TOCHL -- HL indicator record';
R1687 0
R1688 0 SF ELD
R1689 0   $FLIP$TOCHL_FIELDS = SET
R1690 0     TOCHL_CODE      = [$TINY_INTEGER]      ! record type
R1691 0     TES;
R1692 0
R1693 0 LITERAL
R1694 0   FLIPSK_TOCHL_LENGTH = $FIELD_SET_SIZE.  ! Size in FULLWORDS
R1695 0   FLIPSK_TOCHL_SIZE = %UPVAL*$FIELD_SET_SIZE; ! Size in UNITS
R1696 0
R1697 0 MACRO
R1698 0   $FLIP_TOCHL = BLOCK[FLIPSK_TOCHL_LENGTH] FIELD($FLIP$TOCHL_FIELDS)%;
```

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

15-Sep-1984 23:07:40  
15-Sep-1984 22:50:43

VAX-11 BLiss-32 V4.0-742  
\_S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 69 (2)

: 1699 0 REQUIRE 'REQ:FNCT.REQ'; ! Footnote control table

R1700 0  
R1701 0  
R1702 0  
R1703 0  
R1704 0  
R1705 0  
R1706 0  
R1707 0  
R1708 0  
R1709 0  
R1710 0  
R1711 0  
R1712 0  
R1713 0  
R1714 0  
R1715 0  
R1716 0  
R1717 0  
R1718 0  
R1719 0  
R1720 0  
R1721 0  
R1722 0  
R1723 0  
R1724 0  
R1725 0  
R1726 0  
R1727 0  
R1728 0  
R1729 0  
R1730 0  
R1731 0  
R1732 0  
R1733 0  
R1734 0  
R1735 0

Version: 'V04-000'

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++  
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
ABSTRACT: Footnote control table.  
ENVIRONMENT: Transportable BLISS  
AUTHOR: Rich Friday CREATION DATE: 1978

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

K 5  
15-Sep-1984 23:07:40  
15-Sep-1984 22:51:35

VAX-11 Bliss-32 V4.0-742  
S255\$DUA28:[RUNOFF.SRC]FNCT.REQ;1

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(2)

R1736 0  
R1737 0  
R1738 0  
R1739 0  
R1740 0  
R1741 0  
R1742 0  
R1743 0  
R1744 0  
R1745 0  
R1746 0  
R1747 0  
R1748 0  
R1749 0  
R1750 0  
R1751 0  
R1752 0

MODIFIED BY:

- 004 RER00004 Ron Randall 05-Apr-1983  
For DSRPLUS: For footnote numbering, added  
fnct\_first\_line and fnct\_number\_l/r.
- 003 RER00003 Ron Randall 27-Mar-1983  
For DSRPLUS:  
Added fnct\_numbering and fnct\_number to indicate numbering  
of footnotes and to hold the number of the current footnote  
on this page.
- 002 KAD00002 Keith Dawson 07-Mar-1983  
Global edit of all modules. Updated module names, idents,  
copyright dates. Changed require files to BLISS library.
-

R1753 0 MACRO

Number of unexpanded footnotes waiting to be output.  
fnct\_count = fnct [0] %,  
Number of unexpanded footnotes on or before current page.  
fnct\_ready = fnct [1] %,  
The "n" from .FOOTNOTE n (zero if not given).  
fnct\_n = fnct [2] %,  
Number of expanded footnotes present in these tables.  
fnct\_old = fnct [3] %,  
This many footnotes are attached to lines not yet output.  
fnct\_waiting = fnct [4] %,  
TRUE between .FOOTNOTE and .END FOOTNOTE.  
fnct\_collecting = fnct [5] %,  
TRUE if putting a footnote out onto a page.  
fnct\_expanding = fnct [6] %,  
TRUE if numbering footnotes.  
fnct\_numbering = fnct [7] %,  
TRUE if building first line of a numbered footnote.  
fnct\_first\_line = fnct [8] %,  
Left digit of the current footnote in this chapter.  
fnct\_number\_l = fnct [9] %,  
Right digit of the current footnote in this chapter.  
fnct\_number\_r = fnct [10] %,  
Current footnote in this chapter.  
fnct\_number = fnct [11] %;

R1803 0 LITERAL

Number of words of control information in these tables.  
fnct\_control = 12,  
Maximum number of footnotes that can be noted in these tables.

```
R1810 0
R1811 0
R1812 0
R1813 0
R1814 0
R1815 0
R1816 0
R1817 0
R1818 0
R1819 0
R1820 0
R1821 0
R1822 0
R1823 0
R1824 0
R1825 0
R1826 0
R1827 0
R1828 0
R1829 0
R1830 0
R1831 0
R1832 0
R1833 0
R1834 0

        ! fnct_max          = 20;

MACRO
    All footnote control information saved in this vector.

    fnct_definition = VECTOR [fnct_control] %;

MACRO
    Sizes of individual footnotes. There are .fnct_count + .fnct_old
    entries, of which only the last .fnct_count are useful; of these,
    it's ok to output at most .fnct_ready of them right now.
    (The extra position allocated as a one-word work area.)

    fn_ext_size_definition = VECTOR [fnct_max + 1] %;

MACRO
    Number of TSF/MRA pairs in each saved footnote.

    fn_int_size_definition = VECTOR [fnct_max + 1] %;

! End of fnct.REQ
```

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

N 3  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 V4.0-742  
15-Sep-1984 22:50:43 \_\$255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 74  
(2)

: 1835 0 REQUIRE 'REQ:FOOREC.REQ'; ! FOOREC\_... items (for FN record headers)

R1836 0  
R1837 0  
R1838 0  
R1839 0  
R1840 0  
R1841 0  
R1842 0  
R1843 0  
R1844 0  
R1845 0  
R1846 0  
R1847 0  
R1848 0  
R1849 0  
R1850 0  
R1851 0  
R1852 0  
R1853 0  
R1854 0  
R1855 0  
R1856 0  
R1857 0  
R1858 0  
R1859 0  
R1860 0  
R1861 0  
R1862 0  
R1863 0  
R1864 0  
R1865 0  
R1866 0  
R1867 0  
R1868 0  
R1869 0  
R1870 0  
R1871 0  
R1872 0  
R1873 0  
R1874 0  
R1875 0  
R1876 0  
R1877 0  
R1878 0  
R1879 0  
R1880 0  
R1881 0  
R1882 0  
R1883 0  
R1884 0  
R1885 0  
R1886 0  
R1887 0  
R1888 0  
R1889 0  
R1890 0  
R1891 0  
R1892 0

Version: 'V04-000'

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++  
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:

FOOREC.REQ defines the format of record headers for records written  
during footnote processing to the footnote temporary files, 00%RNO.TMP.  
Each record header gives some cursory information about the record that  
follows it. Such records are, typically, a TSF, an MRA, or 'pass-  
through' information intended for indexing or table of contents.

Note that FOOREC ADDRESS, although allocated as part of FOOREC, is  
never read or written. Instead, FOO\_PREAD, on reading a "pass-  
through" record, returns the address of the information there.  
FOO\_PWRIT uses that to determine where the information to be written  
is stored.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1982

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983  
Global edit of all modules. Updated module names, idents,  
copyright dates. Changed require files to BLISS library.

--

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

{ 4  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 V4.0-742  
15-Sep-1984 22:51:47 \$255DUA28:[RUNOFF.SRC]FOOREC.REQ;1 Page 76  
(1)

R1893 0 MACRO  
R1894 0 FOOREC\_MAJOR\_TYPE = FOOREC [0];  
R1895 0 FOOREC\_MINOR\_TYPE = FOOREC [1];  
R1896 0 FOOREC\_RECORD\_SIZE = FOOREC [2];  
R1897 0 FOOREC\_XTN\_PTR = FOOREC [3];  
R1898 0 FOOREC\_ADDRESS = FOOREC [4];  
R1899 0  
R1900 0  
R1901 0 LITERAL  
R1902 0 FOOREC\_SIZE = 4; !Number of words in the record header.  
R1903 0  
R1904 0 MACRO  
R1905 0 FOOREC\_DEFINITION = VECTOR [FOOREC\_SIZE + 1] %;  
R1906 0  
R1907 0  
R1908 0 !Here are the major and minor record types.  
R1909 0 LITERAL  
R1910 0 FOOREC\_MAJ\_TSF = 0; !The record is a TSF data structure.  
R1911 0 FOOREC\_MAJ\_MRA = 1; !The record is an MRA data structure.  
R1912 0 FOOREC\_MAJ\_PASS = 2; !"Pass-through" information.  
R1913 0 FOOREC\_MIN\_INDEX = 0; !Indexing information.  
R1914 0 FOOREC\_MIN\_TOC = 1; !Table of contents information.  
R1915 0 FOOREC\_MIN\_TEXT = 2; !Something to do with normal text.  
R1916 0  
R1917 0 LITERAL  
R1918 0 FOOREC\_MAX\_MAJ = 2; !The largest major record type.  
R1919 0 FOOREC\_MAX\_MIN = 2; !The largest minor record type.  
R1920 0  
R1921 0 ! End of FOOREC.REQ

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

D 4  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 V4.0-742  
15-Sep-1984 22:50:43 \_S2558DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 77  
(2)

: 1922 0 REQUIRE 'REQ:FRMSTK.REQ'; ! Codes for .LS & .NT context save stack

R1923 0 | Version: 'V04-000'  
R1924 0 | \*\*\*\*\*  
R1925 0 | \*  
R1926 0 | \* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY  
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R1942 0 | \* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.  
R1943 0 | \*  
R1944 0 | \*  
R1945 0 | \*  
R1946 0 | \*  
R1947 0 | \*\*\*\*\*  
R1948 0 |  
R1949 0 |  
R1950 0 | ++  
R1951 0 | FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
R1952 0 |  
R1953 0 | ABSTRACT:  
R1954 0 | Definitions related to the data stack on which formatting information  
R1955 0 | is saved by the .NOTE and .LIST commands. Information is removed by  
R1956 0 | .END NOTE and .END LIST commands.  
R1957 0 |  
R1958 0 | ENVIRONMENT: Compatible BLISS  
R1959 0 |  
R1960 0 | AUTHOR: Rich Friday  
R1961 0 |  
R1962 0 | CREATION DATE: 1978  
R1963 0 |  
R1964 0 | MODIFIED BY:  
R1965 0 |  
R1966 0 | 003 KAD00003 Keith Dawson 07-Mar-1983  
R1967 0 | Global edit of all modules. Updated module names, idents,  
R1968 0 | copyright dates. Changed require files to BLISS library.  
R1969 0 |  
R1970 0 | --  
R1971 0 |  
R1972 0 | LITERAL FRMSTK\_LIMIT = CL\_DEFAULT\_SIZE;  
R1973 0 | ! Maximum depth of the stack. It is 15 at  
R1974 0 | this point; but the actual value is kept  
R1975 0 | only in CLIST.REQ.  
R1976 0 |  
R1977 0 | LITERAL FRMSTK\_FILL = 01, ! A copy of SCA\_FILL  
R1978 0 | FRMSTK\_JUSTIFY = 02, ! A copy of SCA\_JUSTIFY  
R1979 0 |

F 4  
15-Sep-1984 23:07:40  
15-Sep-1984 22:51:51

VAX-11 Bliss-32 V4.0-742  
\_S255SDUA28:[RUNOFF.SRC]FRMSTK.REQ;1

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(1)

R1980 0 FRMSTK\_RM = 03; ! A copy of SCA\_RM  
R1981 0 FRMSTK\_LM = 04; ! A copy of SCA\_LM  
R1982 0 FRMSTK\_SPACING = 05; ! A copy of SCA\_SPACING  
R1983 0 FRMSTK\_COMMAND = 06; ! The handler code for the command responsible for this entry  
R1984 0 FRMSTK\_ISEQN = 07; ! The input sequence number for the command  
R1985 0 FRMSTK\_IPAGEN = 08; ! The input page number for the command  
R1986 0 FRMSTK\_FSPEC\_P = 09; ! A reference to the file-spec in which the command occurred.  
R1987 0 FRMSTK\_FSPECC = 10; ! The length of the file-spec in which the command occurred.  
R1988 0 FRMSTK\_REQ\_D = 11; ! The .REQUIRE nesting level in effect  
R1989 0 FRMSTK\_CROCK = 12; ! A copy of SCA\_CROCK  
R1990 0 FRMSTK\_DO\_NBITS = 13; ! A copy of SCA\_DO\_NBITS  
R1991 0 FRMSTK\_KER = 14; ! A copy of SCA\_KER  
R1992 0 FRMSTK\_INDEX = 15; ! A copy of SCA\_INDEX.  
R1993 0  
R1994 0 LITERAL  
R1995 0 FRMSTK\_ITEM\_CNT = 15; ! Number of pieces of info per entry  
R1996 0  
R1997 0 !One more entry is allocated than requested so than the routine  
R1998 0 !LIT (process literals) can save information.  
R1999 0 STRUCTURE  
R2000 0 FORM\_STACK[I,J;N=FRMSTK\_ITEM\_CNT,M=FRMSTK\_LIMIT] =  
R2001 0 [ZUPVAL\*( N\*(M + 1) )]  
R2002 0 (FORM\_STACK + ZUPVAL\*( (I - 1)\*N + J - 1) );  
R2003 0  
R2004 0 ! End of FRMSTK.REQ

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

6 4  
15-Sep-1984 23:07:40  
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742  
\$255\$DUA28:[RUNOFF.SRC]DSI

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(2)

: 2005 0 REQUIRE 'REQ:FSPACK.REQ'; ! FIXED\_STRING structure & FS\_... macros

R2006 0  
R2007 0  
R2008 0  
R2009 0  
R2010 0  
R2011 0  
R2012 0  
R2013 0  
R2014 0  
R2015 0  
R2016 0  
R2017 0  
R2018 0  
R2019 0  
R2020 0  
R2021 0  
R2022 0  
R2023 0  
R2024 0  
R2025 0  
R2026 0  
R2027 0  
R2028 0  
R2029 0  
R2030 0  
R2031 0  
R2032 0  
R2033 0  
R2034 0  
R2035 0  
R2036 0  
R2037 0  
R2038 0  
R2039 0  
R2040 0  
R2041 0  
R2042 0  
R2043 0  
R2044 0  
R2045 0  
R2046 0  
R2047 0  
R2048 0  
R2049 0  
R2050 0  
R2051 0  
R2052 0  
R2053 0  
R2054 0  
R2055 0  
R2056 0  
R2057 0  
R2058 0  
R2059 0  
R2060 0  
R2061 0  
R2062 0

Version: 'V04-000'

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++  
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:

Macros to manipulate FIXED\_STRINGS: transportable, fixed-length  
strings.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983  
Global edit of all modules. Updated module names, idents,  
copyright dates. Changed require files to BLISS library.

--  
+  
FIXED STRING is a structure that contains a string of an expected maximum  
length, plus additional locations to contain information related to the  
status of the string.

STRUCTURE

fixed\_string[i;n=1] =  
[4\*XUPVAL + CHSALLOCATION(N\*XUPVAL)]  
(fixed\_string = XUPVAL\*( 1 - 1 ) );

```

R2063 0
R2064 0
R2065 0
R2066 0
R2067 0
R2068 0
R2069 0
R2070 0
R2071 0
R2072 0
R2073 0
R2074 0
R2075 0
R2076 0
MR2077 0
MR2078 0
MR2079 0
MR2080 0
MR2081 0
MR2082 0
R2083 0
R2084 0
R2085 0
R2086 0
R2087 0
R2088 0
MR2089 0
MR2090 0
R2091 0
R2092 0
MR2093 0
MR2094 0
R2095 0
R2096 0
MR2097 0
MR2098 0
R2099 0
R2100 0
MR2101 0
MR2102 0
R2103 0
R2104 0
R2105 0
R2106 0
R2107 0
R2108 0
MR2109 0
MR2110 0
MR2111 0
MR2112 0
MR2113 0
MR2114 0
R2115 0
R2116 0
R2117 0
R2118 0
R2119 0

    /* The following literals are names for the fields allocated above. These
       names are not to be used by a user.

    LITERAL
        FS__FCP      = 01,    ! CHSPTR to first character position.
        FS__NCP      = 02,    ! CHSPTR to next character position.
        FS__MAX      = 03,    ! Capacity of the counted string.
        FS__LEN      = 04,    ! Current length.

    /* FS_ALLOCATE is used to allocate and initialize a fixed-length string.

    MACRO
        fs_allocate (fs_name,fs_maxl) =
            fs_name:fixed_string [fs_maxl]
            INITIAL (0,
                      0,
                      fs_maxl,
                      0)
            %

    /* Control information is accessed via the following macros.

    MACRO
        fs_start (fs_name) =
            fs_name [fs__fcp]
            %
        fs_next (fs_name) =
            fs_name [fs__ncp]
            %
        fs_maxsize (fs_name) =
            fs_name [fs__max]
            %
        fs_length (fs_name) =
            fs_name [fs__len]
            %

    /* FS_INIT initializes a fixed-length string to the null string.

    MACRO
        fs_init (fs_name) =
            BEGIN
                fs_length (fs_name)      = 0;
                fs_start (fs_name)       = CHSPTR (fs_name [5]);
                fs_next (fs_name)        = .fs_start (fs_name);
            END
            %

    /* FS_WCHAR puts a character into the fixed-length string.
```

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

15-Sep-1984 23:07:40  
15-Sep-1984 22:51:57

VAX-11 BLiss-32 V4.0-742

\_S255\$DUA28:[RUNOFF.SRC]FSPACK.REQ;1

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```
R2120 0
R2121 0
R2122 0
R2123 0
R2124 0
R2125 0
R2126 0
R2127 0
R2128 0
R2129 0
R2130 0
R2131 0
R2132 0
MR2133 0
MR2134 0
MR2135 0
MR2136 0
MR2137 0
R2138 0
R2139 0
R2140 0

MACRO
  fs_wchar (fs_name,khar) =
    BEGIN
      CHSWCHAR_A (khar, fs_next (fs_name));
      fs_length (fs_name) = .fs_length (fs_name) + 1; !Write character and advance pointer.
    END
  %;

  FS_RCHAR gets a character from the fixed-length string.

MACRO
  fs_rchar (fs_name,khar) =
    BEGIN
      khar = CHSRCHAR_A (fs_next (fs_name));
      fs_length (fs_name) = .fs_length (fs_name) - 1; !Read character and advance pointer.
    END
  %;

!
```

End of FSPACK.REQ

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

15-Sep-1984 23:07:40 15-Sep-1984 22:50:43 VAX-11 Bliss-32 V4.0-742  
S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 84 (2)

: 2141 0 REQUIRE 'REQ:GCA.REQ'; ! GCA (General Control Array) definitions

R2142 0 GCA.REQ Definitions pertaining to the General Control Area (GCA)  
R2143 0 IDENT 026

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\*\* FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:

Definitions for the GCA (Global Control Area). Initialized by  
DOOPTS from command-line information.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

026 REM00026 Ray Marshall 16-May-1983  
Added support for outputting output lines numbers by adding  
another macro: GCA\_CMD\_OSA

025 REM00025 Ray Marshall 16-November-1983  
Added macros so that Ken's SAVRES module can load cells with  
them instead of using numeric offsets. They have the string  
"\_f\_" within them.

024 KFA00024 Ken Alden 10-Oct-1983  
Put gca\_cmd\_pages in the right place.

023 KFA00023 Ken Alden 06-Oct-1983  
Added gca\_cmd\_pages to signal the /pages qualifier.

R2199 0 | 022 KFA00022 Ken Alden 27-Jul-1983  
R2200 0 | Added gca\_flag\_cmd to SAVE list.  
R2201 0 | 021 KFA00021 Ken Alden 15-Jul-1983  
R2202 0 | Added gca\_do\_cont\_already, gca\_do\_index\_already.  
R2203 0 | 020 KFA00020 Ken Alden 27-Jun-1983  
R2204 0 | Added gca\_cref\_errcnt to the top eight bits of black\_box.  
R2205 0 | 019 KFA00019 Ken Alden 13-Jun-1983  
R2206 0 | Made use of GCA[45] for flagging /down line skipping. Used in  
R2207 0 | TOPPAG and USKIPL.  
R2208 0 | 018 KAD00018 Keith Dawson 12-May-1983  
R2209 0 | Use 16 bits each for page, index, contents, cref counts.  
R2210 0 | 017 KAD00017 Keith Dawson 21-Mar-1983  
R2211 0 | Add bits for LN01 output options.  
R2212 0 | 016 KFA00016 Ken Alden 16-Mar-1983  
R2213 0 | Save/restore now permitted in DSR.  
R2214 0 | 015 KAD00015 Keith Dawson 07-Mar-1983  
R2215 0 | Global edit of all modules. Updated module names, idents,  
R2216 0 | copyright dates. Changed require files to BLISS [library].  
R2217 0 |  
R2218 0 |--  
R2219 0 |  
R2220 0 |  
R2221 0 |  
R2222 0 |  
R2223 0 |  
R2224 0 |  
R2225 0 |  
R2226 0 |  
MACRO

R2227 0   gca_com_start	= GCA[ 00 ]%	A CHSPTR to the first character of the current command (usually it's a '.')
R2228 0   gca_autopara	= .GCA[ 01 ]%	!(SAVEALL)True if user said .AUTOPARAGRAPH
R2229 0   gca_f_autopara	= GCA[ 01 ]%	
R2230 0   gca_autosubt	= .GCA[ 02 ]%	!(SAVEALL)True if user said .AUTOSUBTITLE
R2231 0   gca_f_autosubt	= GCA[ 02 ]%	
R2232 0   gca_autotabl	= .GCA[ 03 ]%	!(SAVEALL)True if user said .AUTOTABLE
R2233 0   gca_f_autotabl	= GCA[ 03 ]%	
R2234 0   gca_autojust	= .GCA[ 04 ]%	!(SAVEALL)True if user said .AUTOJUSTIFY
R2235 0   gca_f_autojust	= GCA[ 04 ]%	
R2236 0   gca_bars	= (GCA[05])<BAR-->%	!GCA BARS ENAB & GCA BARS ON.
R2237 0   gca_bars_enab	= (GCA[06])<BAR-->%	Controlled by .ENAB[E]/.DISABLE BAR.
R2238 0   gca_bars_on	= (GCA[07])<BAR-->%	Controlled by .BEGIN/.END BAR.
R2239 0   gca_ever_bars	= (GCA[08])<BAR-->%	True if change bars ever enabled.
R2240 0   gca_draft_f	= GCA[ 09 ]%	If user said /DEBUG, the character to be used as draft flag (from .VARIABLE
R2241 0   gca_chapt	= GCA[ 10 ]%	True if document contains chapters/appendices
R2242 0   gca_twidh_36	= GCA[ 11 ]%	TOPS-20 terminal wrap width (DSRPLUS only).
R2243 0   gca_concat	= GCA[ 12 ]%	True if .NO SPACE is pending.
R2244 0   gca_cmd_msg	= GCA[ 13 ]%	Routing code for error messages
R2245 0   gca_lit_count	= GCA[ 14 ]%	If a counted literal, the # of lines.
R2246 0   gca_pchäx	= GCA[ 15 ]%	True if a .NUMBER CHAPTER or .NUMBFR APPENDIX command has already set up NP
R2247 0   gca_tescape_36	= GCA[ 16 ]%	TOPS-20 terminal escape characteristics (DSRPLUS only)
R2248 0   gca_cmd_nbits	= GCA[ 17 ]%	Ultimate controls for miscellaneous functions.
R2249 0   gca_lit_flag	= GCA[ 18 ]%	status of .GCA_FLAG_CMD during literal processing.
R2250 0   gca_cmd_lstbts	= GCA[ 19 ]%	Ultimate controls for misc functions.
R2251 0   gca_literal	= GCA[ 20 ]%	True between .LITERAL and .END LITERAL

R2256 0	gca_xcase	= GCA[ 21 ]%, !(SAVEALL)Case rules for index entries.
R2257 0	gca_f_xcase	= GCA[ 21 ]%,
R2258 0		
R2259 0	gca_page_cnt	= GCA[ 22 ]%, !Number of pages generated so far.
R2260 0	gca_contents_cnt	= GCA[ 23 ]%, !Number of table-of-contents entries written to the .BRN file.
R2261 0	gca_index_cnt	= GCA[ 24 ]%, !Number of index entries written to the .BRN file.
R2262 0	gca_old_cref_cnt	= GCA[ 25 ]%, !Number of cross-reference entries read from the old .BRN file.
R2263 0	gca_new_cref_cnt	= GCA[ 26 ]%, !Number of cross-reference entries written to the .BRN file.
R2264 0		
R2265 0	gca_orange_cnt	= GCA[ 27 ]%, !Count of number of page ranges specified on /PAGE_RANGE switch.
R2266 0	gca_skip_out	= GCA[ 28 ]%, !True if skipping output because of a /PAGE_RANGE specification.
R2267 0	gca_debug_index	= (GCA[29])<0,1>%, !True if debugging the index.
R2268 0	gca_debug_toc	= (GCA[29])<1,1>%, !True if debugging the table of contents.
R2269 0	gca_debug_cnd	= (GCA[29])<2,1>%, !True if debugging conditionals (.IF, etc.).
R2270 0	gca_debug_fil	= (GCA[29])<3,1>%, !True if want file names listed.
R2271 0	gca_debug_cref	= (GCA[29])<4,1>%, !True if want cross-reference errors flagged inline.
R2272 0	gca_debug_save	= (GCA[29])<5,1>%, !True if want save/restore information echoed.
R2273 0	gca_max_asn	= GCA[ 30 ]%, !Result of last .AUTOSUBTITLE command. Remembered during .NO AUTOSUBTITLE
R2274 0	gca_btc	= (GCA[31])<0,1>%, !True if a binary table of contents is wanted.
R2275 0	gca_cmd_btc	= (GCA[31])<1,1>%, !True iff user said /INTERMEDIATE.
R2276 0	gca_bix	= (GCA[31])<2,1>%, !True if a binary index is wanted.
R2277 0		
R2278 0	gca_case	= .GCA[ 32 ]%, !(SAVEALL)Set by .UPPER/LOWER CASE
R2279 0	gca_f_case	= GCA[ 32 ]%
R2280 0	gca_flag_cmd	= .GCA[ 33 ]%, !(SAVE)Last .FLAGS ALL/.NO FLAGS ALL command
R2281 0	gca_f_flag_cmd	= GCA[ 33 ]%
R2282 0		
R2283 0	gca_pwidth	= GCA[ 34 ]%, !Physical page width
R2284 0		
R2285 0	gca_lwidth	= .GCA[ 35 ]%, !(SAVE)Logical page width
R2286 0	gca_f_lwidth	= GCA[ 35 ]%
R2287 0		
R2288 0	gca_clit	= GCA[ 36 ]%, !True for counted literals.
R2289 0	gca_note_prim	= GCA[ 37 ]%, Primary margin adjust for .NOTE
R2290 0	gca_note_alt	= GCA[ 38 ]%, Alternate margin adjust for .NOTE
R2291 0	gca_skipping	= (GCA[39])<0,1>%, !True if in the FALSE branch of an .IF command.
R2292 0	gca_nia	= GCA[ 40 ]%, Count of attempted negative indents.
R2293 0	gca_xmarg	= GCA[ 41 ]%, Count of crossed margin attempts.
R2294 0	gca_normal_xtn	= GCA[ 42 ]%, Next transaction number for index entry NOT in a footnote.
P2295 0	gca_foot_xfn	= GCA[ 43 ]%, Next transaction number for index entry in a footnote.
R2296 0	gca_index_fmt	= GCA[ 44 ]%, If True, generate dots in index. (Not currently set anywhere in the code.)
R2297 0	gca_down_flag	= (GCA[45])<0,1>%, !True if the unconditional lines are for /down.
R2298 0	gca_max_require	= GCA[ 46 ]%, Same as MAX REQUIRE.
R2299 0	gca_req_depth	= GCA[ 47 ]%, Current depth of .REQUIRE (usually 0, i.e., not a .REQUIRE file).
R2300 0	gca_fehler	= GCA[ 48 ]%, True if any errors have been found.
R2301 0	gca_errcnt	= GCA[ 49 ]%, Count of lines of error messages.
R2302 0	gca_err_dir	= GCA[ 50 ]%, Indicates where errors are to be reported.
R2303 0		
R2304 0	gca_keep	= .GCA[ 51 ]%, !(SAVE)True if user said .KEEP.
R2305 0	gca_f_keep	= GCA[ 51 ]%
R2306 0		
R2307 0	gca_io_flags	= GCA[ 52 ]%, !General I/O control flags.
R2308 0	gca_cmd_quick	= (GCA[52])<0,1>%, !True if /QUICK or /NOOUTPUT.
R2309 0	termination_log	= (GCA[52])<1,1>%, !True if /LOG.
R2310 0	gca_flip	= (GCA[52])<2,1>%, !True if /DEC=FLIP.
R2311 0	gca_s_output	= (GCA[52])<3,1>%, !True if /OUTPUT was explicitly specified.
R2312 0	gca_op_dev	= (GCA[52])<4,4>%, !Type of output device (see OPDEV.REQ).

```

R2313 0
R2314 0 gca_ln01_ital_under = (GCA[52])<8,1>%; ! For LN01 output: set=italics, clear=underlining.
R2315 0 gca_ln01_port_lnd = (GCA[52])<9,1>%; ! For LN01 output: set=portrait, clear=landscape.
R2316 0 gca_cmd_pages = (GCA[52])<10,1>%; !True if /PAGES.
R2317 0
R2318 0 gca_diag1 = GCA[ 53 ]%; !First 16 diagnostic control flags.
R2319 0 gca_diag2 = GCA[ 54 ]%; !Second 16 diagnostic control flags.
R2320 0
R2321 0 gca_xp_over = GCA[ 55 ]%; !True if user gave any .XP/.YP commands since last .DX or .PX.
R2322 0 gca_line_pend = GCA[ 56 ]%; !Used for OUTHDR in determining if the header has been processed and output.
R2323 0
R2324 0 gca_black_box = GCA[ 57 ]%; !True if user said /AUTOMATIC.
R2325 0 gca_cref_errcnt = (GCA[57])<8,8>%; !Number of unresolved cross references.
R2326 0 gca_cross_reference = (GCA[58])<0,1>%; !True if user said /CROSS_REFERENCE (it's the default).
R2327 0 gca_expand_cref = (GCA[58])<1,1>%; !True if cross references should be expanded.
R2328 0 gca_old_brn_exists = (GCA[58])<2,1>%; !True if an old .BRN file exists and was read.
R2329 0 gca_cref_changed = (GCA[58])<3,1>%; !True if any cross-reference changed in the course of this run.
R2330 0 gca_do_cont_already = (GCA[58])<4,1>%; !True if a do contents has been processed in this run.
R2331 0 gca_do_index_already = (GCA[58])<5,1>%; !True if a do index has been processed in this run.
R2332 0 gca_rerun_count = (GCA[59])<0,8>%; !Number of times DSRPLUS must be rerun for complete and correct /AUTOMATIC.
R2333 0 gca_pass_count = (GCA[59])<8,8>%; !Number of the current /AUTOMATIC rerun pass.
R2334 0
R2335 0 LITERAL
R2336 0   gca_size = 64; ! Number of cells in GCA. As of version V04-000 there are
R2337 0           ! 5 free cells.
R2338 0
R2339 0 !The following literals define where errors are to be reported
R2340 0 !NOTE: The bit representation of these literals is used by DOOPTS.
R2341 0 LITERAL
R2342 0   report_err_none = 0; !Report no error messages
R2343 0   report_err_file = 1; !Report in output file only.
R2344 0   report_err_std = 2; !Report on standard error log only.
R2345 0   report_err_both = 3; !Report errors in both output file and on standard error device.
R2346 0
R2347 0 !Definition of diagnostic control flags. The names may be later changed,
R2348 0 !but for now, these names will at least provide easy access for initial use.
R2349 0 MACRO
R2350 0   diag1_0 = (GCA_DIAG1)<0,1>%
R2351 0   diag1_1 = (GCA_DIAG1)<1,1>%
R2352 0   diag1_2 = (GCA_DIAG1)<2,1>%
R2353 0   diag1_3 = (GCA_DIAG1)<3,1>%
R2354 0   diag1_4 = (GCA_DIAG1)<4,1>%
R2355 0   diag1_5 = (GCA_DIAG1)<5,1>%
R2356 0   diag1_6 = (GCA_DIAG1)<6,1>%
R2357 0   diag1_7 = (GCA_DIAG1)<7,1>%
R2358 0   diag1_8 = (GCA_DIAG1)<8,1>%
R2359 0   diag1_9 = (GCA_DIAG1)<9,1>%
R2360 0   diag1_10 = (GCA_DIAG1)<10,1>%
R2361 0   diag1_11 = (GCA_DIAG1)<11,1>%
R2362 0   diag1_12 = (GCA_DIAG1)<12,1>%
R2363 0   diag1_13 = (GCA_DIAG1)<13,1>%
R2364 0   diag1_14 = (GCA_DIAG1)<14,1>%
R2365 0   diag1_15 = (GCA_DIAG1)<15,1>%
R2366 0
R2367 0 MACRO
R2368 0   diag2_0 = (GCA_DIAG2)<0,1>%
R2369 0   diag2_1 = (GCA_DIAG2)<1,1>%

```

```
R2370 0 diag2_2 = (GCA_DIAG2)<2,1>%;  
R2371 0 diag2_3 = (GCA_DIAG2)<3,1>%;  
R2372 0 diag2_4 = (GCA_DIAG2)<4,1>%;  
R2373 0 diag2_5 = (GCA_DIAG2)<5,1>%;  
R2374 0 diag2_6 = (GCA_DIAG2)<6,1>%;  
R2375 0 diag2_7 = (GCA_DIAG2)<7,1>%;  
R2376 0 diag2_8 = (GCA_DIAG2)<8,1>%;  
R2377 0 diag2_9 = (GCA_DIAG2)<9,1>%;  
R2378 0 diag2_10 = (GCA_DIAG2)<10,1>%;  
R2379 0 diag2_11 = (GCA_DIAG2)<11,1>%;  
R2380 0 diag2_12 = (GCA_DIAG2)<12,1>%;  
R2381 0 diag2_13 = (GCA_DIAG2)<13,1>%;  
R2382 0 diag2_14 = (GCA_DIAG2)<14,1>%;  
R2383 0 diag2_15 = (GCA_DIAG2)<15,1>%;  
R2384 0  
R2385 0  
MACRO  
!
```

The following are true if user:

```
R2386 0  
R2387 0 gca_cmd_bar = (GCA_CMD_LSTBTS)<BAR-->%; did not forbid change bars on the command line.  
R2388 0 gca_cmd_isq = (GCA_CMD_LSTBTS)<ISQ-->%; requested input sequence numbers.  
R2389 0 gca_cmd_osq = (GCA_CMD_LSTBTS)<OSQ-->%; requested output line numbers.  
R2390 0 gca_cmd_rft = (GCA_CMD_LSTBTS)<RFT-->%; said /RIGHT.  
R2391 0 gca_cmd_und = (GCA_CMD_NBITS)<UND--5%, said /UNDERLINING.  
R2392 0 gca_cmd_bld = (GCA_CMD_NBITS)<BLD-->%; said /BOLDING.  
R2393 0 gca_cmd_ovr = (GCA_CMD_NBITS)<OVR-->%; said /OVERSTRIKING.  
R2394 0 gca_cmd_ind = (GCA_CMD_NBITS)<IND-->%; said /INDEXING.  
R2395 0  
R2396 0  
MR2397 0 MACRO  
MR2398 0 gca_definition =  
R2399 0 VECTOR [gca_size]  
%;
```

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

P 5  
15-Sep-1984 23:07:40  
15-Sep-1984 22:50:43

VAX-11 Bliss-32 v4.0-742  
\_S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1

Page 90  
(2)

: 2400 0 REQUIRE 'REQ:GETQSC.REQ'; ! GETQ\_... Completion codes

R2401 0  
R2402 0  
R2403 0  
R2404 0  
R2405 0  
R2406 0  
R2407 0  
R2408 0  
R2409 0  
R2410 0  
R2411 0  
R2412 0  
R2413 0  
R2414 0  
R2415 0  
R2416 0  
R2417 0  
R2418 0  
R2419 0  
R2420 0  
R2421 0  
R2422 0  
R2423 0  
R2424 0  
R2425 0  
R2426 0  
R2427 0  
R2428 0  
R2429 0  
R2430 0  
R2431 0  
R2432 0  
R2433 0  
R2434 0  
R2435 0  
R2436 0  
R2437 0  
R2438 0  
R2439 0  
R2440 0  
R2441 0  
R2442 0  
R2443 0  
R2444 0  
R2445 0  
R2446 0  
R2447 0  
R2448 0  
R2449 0  
R2450 0  
R2451 0  
R2452 0  
R2453 0  
R2454 0

Version: 'V04-000'

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++  
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:  
Completion codes returned by GETQS

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983  
Global edit of all modules. Updated module names, idents,  
copyright dates. Changed require files to BLISS library.

--

LITERAL

GETQS_NORMAL	= 0.	!Everything went ok.
GETQS_BAD	= 1.	!Quoted string ill-formed, etc.
GETQS_TOO_LONG	= 2.	!Too many characters.
GETQS_NONE	= 3.	!There was no string to get.

End of GETQSC.REQ

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

F 5  
15-Sep-1984 23:07:40  
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742  
S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 92 (2)

: 2455 0 REQUIRE 'REQ:GNCC.REQ'; ! Completion codes returned by GNAME.

R2456 0  
R2457 0  
R2458 0  
R2459 0  
R2460 0  
R2461 0  
R2462 0  
R2463 0  
R2464 0  
R2465 0  
R2466 0  
R2467 0  
R2468 0  
R2469 0  
R2470 0  
R2471 0  
R2472 0  
R2473 0  
R2474 0  
R2475 0  
R2476 0  
R2477 0  
R2478 0  
R2479 0  
R2480 0  
R2481 0  
R2482 0  
R2483 0  
R2484 0  
R2485 0  
R2486 0  
R2487 0  
R2488 0  
R2489 0  
R2490 0  
R2491 0  
R2492 0  
R2493 0  
R2494 0  
R2495 0  
R2496 0  
R2497 0  
R2498 0  
R2499 0  
R2500 0  
R2501 0  
R2502 0  
R2503 0  
R2504 0  
R2505 0  
R2506 0  
R2507 0  
R2508 0  
R2509 0  
R2510 0  
R2511 0  
R2512 0

Version: 'V04-000'

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++  
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:  
Completion codes returned by GNAME.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983  
Global edit of all modules. Updated module names, idents,  
copyright dates. Changed require files to BLISS library.

--  
LITERAL

GNAME\_NORMAL = 01; ! All went well.  
GNAME\_NO\_NAME = 02; ! Illegally formed or missing name.  
GNAME\_TOO\_LONG = 03; ! Excess characters have been dropped.

LITERAL

GNAME\_CC\_COUNT = 03; ! Number of condition codes returned  
! by GNAME.

End of GNCC.REQ

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

H 5  
15-Sep-1984 23:07:40  
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742  
\_S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 94 (2)

: 2513 0 REQUIRE 'REQ:GSLUCC.REQ'; ! GSLU\_... Completion codes

R2514 0  
R2515 0  
R2516 0  
R2517 0  
R2518 0  
R2519 0  
R2520 0  
R2521 0  
R2522 0  
R2523 0  
R2524 0  
R2525 0  
R2526 0  
R2527 0  
R2528 0  
R2529 0  
R2530 0  
R2531 0  
R2532 0  
R2533 0  
R2534 0  
R2535 0  
R2536 0  
R2537 0  
R2538 0  
R2539 0  
R2540 0  
R2541 0  
R2542 0  
R2543 0  
R2544 0  
R2545 0  
R2546 0  
R2547 0  
R2548 0  
R2549 0  
R2550 0  
R2551 0  
R2552 0  
R2553 0  
R2554 0  
R2555 0  
R2556 0  
R2557 0  
R2558 0  
R2559 0  
R2560 0  
R2561 0  
R2562 0  
R2563 0  
R2564 0  
R2565 0  
R2566 0  
R2567 0  
R2568 0  
R2569 0  
R2570 0

Version: 'V04-000'

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\*+  
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:  
Completion codes returned by GSLU.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983  
Global edit of all modules. Updated module names, idents,  
copyright dates. Changed require files to BLISS library.

--  
LITERAL

GSLU\_NORMAL = 01; ! All went well.  
GSLU\_NONE = 02; ! Missing string.  
GSLU\_TOO\_LONG = 03; ! Excess characters have been dropped.

LITERAL

GSLU\_CC\_COUNT = 03; ! Number of condition codes returned  
! by GSLU.

!

End of GSLUCC.REQ

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

15 Sep 1984 23:07:40  
15 Sep 1984 22:50:43  
VAX-11 Bliss-32 V4.0-742  
S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 96  
(2)

: U 2571 0  
: U 2572 0  
: U 2573 0  
: U 2574 0  
: U 2575 0  
: U 2576 0  
  %IF DSRPLUS %THEN  
  REQUIRE 'REQ:GTOKCC.REQ';         ! GT\_... Completion codes  
  %F  
  REQUIRE 'REQ:HCT.REQ';         ! HCT\_... (Heading Control Table) & LAYOUT\_...

R2577 0  
R2578 0  
R2579 0  
R2580 0  
R2581 0  
R2582 0  
R2583 0  
R2584 0  
R2585 0  
R2586 0  
R2587 0  
R2588 0  
R2589 0  
R2590 0  
R2591 0  
R2592 0  
R2593 0  
R2594 0  
R2595 0  
R2596 0  
R2597 0  
R2598 0  
R2599 0  
R2600 0  
R2601 0  
R2602 0  
R2603 0  
R2604 0  
R2605 0  
R2606 0  
R2607 0  
R2608 0  
R2609 0  
R2610 0  
R2611 0  
R2612 0  
R2613 0  
R2614 0  
R2615 0  
R2616 0

HCT.REQ Definitions for Header Control Tables

Version: 'V04-000'

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++  
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:  
Definitions pertaining to tables that define how headings, etc.  
are to appear.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 16-October-1980

```

R2617 0
R2618 0
R2619 0
R2620 0 MODIFIED BY:
R2621 0 006 KFA00006 Ken Alden 10-Jul-1984
R2622 0 Number_page and NMPG_NP are now part of SAVE (not saveall).
R2623 0
R2624 0 005 REM00005 Ray Marshall 16-November-1983
R2625 0 Added macros so that Ken's SAVRES module can load cells with
R2626 0 them instead of using numeric offsets. They have the string
R2627 0 "-f-" within them.
R2628 0
R2629 0 004 KFA00004 Ken Alden 16-Mar-1983
R2630 0 SAVE/RESTORE now enabled for DSR
R2631 0
R2632 0 003 KAD00003 Keith Dawson 07-Mar-1983
R2633 0 Global edit of all modules. Updated module names, idents,
R2634 0 copyright dates. Changed require files to BLISS library.
R2635 0
R2636 0
R2637 0
R2638 0 MACRO !
R2639 0 HCT_FIRST_TITLE = HCT[ 0 ]%, ! True if headings wanted on ALL pages.
R2640 0 HCT_DATE = .HCT[ 1 ]%, ! (SAVEALL)True if the date is wanted in the subtitle.
R2641 0 HCT_f_DATE = HCT[ 1 ]%
R2642 0 HCT_HEADERS = .HCT[ 2 ]%, ! (SAVEALL)True if headers are wanted.
R2643 0 HCT_f_HEADERS = HCT[ 2 ]%
R2644 0 HCT_NUMBER_PAGE = .HCT[ 3 ]%, ! (SAVE)True if pages are to be numbered.
R2645 0 HCT_f_NUMBER_PAGE= HCT[ 3 ]%
R2646 0
R2647 0 HCT_ODD_EVEN = HCT[ 4 ]%, ! "ODD" or "EVEN"-ness of page.
R2648 0
R2649 0 HCT_HD_CASE = .HCT[ 5 ]%, ! (SAVEALL)Case rules for the words PAGE/INDEX
R2650 0 HCT_f_HD_CASE = HCT[ 5 ]%
R2651 0 HCT_SUBLTITLE = .HCT[ 6 ]%, ! (SAVEALL)TRUE if subtitles wanted.
R2652 0 HCT_f_SUBLTITLE = HCT[ 6 ]%
R2653 0
R2654 0 HCT_LAYOUT = HCT[ 7 ]%, ! The page layout to be used (see below)
R2655 0 HCT_LAYOUTN = HCT[ 8 ]%, ! Blank lines between text and page number at bottom.
R2656 0 HCT_LAYOUT_NP = HCT[ 9 ]%, ! The page layout to be used on the next page.
R2657 0 HCT_LAYOUTN_NP = HCT[10 ]%, ! Same as HCT_LAYOUTN, but for next page.
R2658 0
R2659 0 HCT_NMPG_NP = .HCT[11 ]%, ! (SAVE)True if pages are to be numbered on the next page.
R2660 0 HCT_f_NMPG_NP = HCT[11 ]%
R2661 0
UR2662 0 XIF DSRPLUS XTHEN
UR2663 0 HCT_TITLE_ALWAYS= HCT[12 ]% ! True if titles wanted on ALL pages, including chapter pages.
R2664 0 XFI ;
R2665 0
R2666 0 LITERAL
UR2667 0 XIF DSRPLUS XTHEN
UR2668 0 HCT_SIZE = 13;
R2669 0 XELSE HCT_SIZE = 12;
R2670 0 XFI
R2671 0
R2672 0
R2673 0 LITERAL ! Case rules for words PAGE and INDEX

```

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

M 5  
15-Sep-1984 23:07:40  
15-Sep-1984 22:52:18

VAX-11 Bliss-32 V4.0-742  
S255\$DUA28:[RUNOFF.SRC]HCT.REQ;1

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(2)

R2674 0      HCT\_HD\_LOWER = 0,  
R2675 0      HCT\_HD\_UPPER = 1,  
R2676 0      HCT\_HD\_MIXED = 2;  
R2677 0  
R2678 0      LITERAL  
R2679 0      LAYOUT\_STANDARD = 0,  
R2680 0      LAYOUT\_CENTERED = 1,  
R2681 0      LAYOUT\_FLIP\_ODD = 2,  
R2682 0  
R2683 0      LAYOUT\_RUN\_BOTC = 3;  
R2684 0  
R2685 0  
R2686 0  
MR2687 0      MACRO      HCT\_DEFINITION =  
R2688 0                  VECTOR[HCT\_SIZE];  
                  ! .HEADERS LOWER  
                  ! .HEADERS UPPER  
                  ! .HEADERS MIXED  
                  ! Names for page layouts  
                  Standard RUNOFF  
                  Title, subtitle centered at top, page number at bottom.  
                  Page number at bottom. Flip title, subtitle at top.  
                  Start with titles right if odd page.  
                  Same as LAYOUT STANDARD, but include the running page  
                  number centered at the bottom of the page.

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

N 5

15-Sep-1984 23:07:40  
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742  
\_S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1

Page 100  
(2)

: 2689 0 REQUIRE 'REQ:HLC.REQ'; ! HLC\_... (Header Level Control) area items

R2690 0  
R2691 0  
R2692 0  
R2693 0  
R2694 0  
R2695 0  
R2696 0  
R2697 0  
R2698 0  
R2699 0  
R2700 0  
R2701 0  
R2702 0  
R2703 0  
R2704 0  
R2705 0  
R2706 0  
R2707 0  
R2708 0  
R2709 0  
R2710 0  
R2711 0  
R2712 0  
R2713 0  
R2714 0  
R2715 0  
R2716 0  
R2717 0  
R2718 0  
R2719 0  
R2720 0  
R2721 0  
R2722 0  
R2723 0  
R2724 0  
R2725 0  
R2726 0  
R2727 0  
R2728 0  
R2729 0  
R2730 0  
R2731 0  
R2732 0  
R2733 0  
R2734 0  
R2735 0  
R2736 0  
R2737 0  
MR2738 0  
MR2739 0  
R2740 0  
MR2741 0  
MR2742 0  
MR2743 0  
R2744 0  
MR2745 0  
MR2746 0

Version: 'V04-000'

\*\*\*\*\*

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FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:  
Definitions relating to the HLC (Header Level Control area).

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983  
Global edit of all modules. Updated module names, idents,  
copyright dates. Changed require files to BLISS {library}.

--

MACRO

HLC_UPPER	= HLC[0]	!Maximum .HL number for which entire text !is to be in upper case.
HLC_CAP	%. = HLC[1]	!Maximum .HL number for which to capitalize !first character of each word and leave !others alone.
HLC_RUNON	%. = HLC[2]	!Smallest .HL number for which to generate !'-' and leave no break before next text line.

R2747 0  
MR2748 0  
MR2749 0  
R2750 0  
MR2751 0  
R2752 0  
MR2753 0  
R2754 0  
MR2755 0  
R2756 0  
MR2757 0  
MR2758 0  
R2759 0  
MR2760 0  
R2761 0  
MR2762 0  
R2763 0  
R2764 0  
R2765 0  
R2766 0  
R2767 0  
R2768 0  
MR2769 0  
R2770 0  
MR2771 0  
R2772 0  
MR2773 0  
R2774 0  
R2775 0  
R2776 0  
MR2777 0  
R2778 0  
R2779 0  
R2780 0

HLC\_CO\_NBITS    %,  
                  = HLC[3]    !Control carry-over of underlining/bolding/overstriking  
                  %  
HLC\_HEADLC     %,  
                  = HLC[4]    !Leave this many blank lines after the header.  
                  %  
HLC\_HEADLT     %,  
                  = HLC[5]    !Anticipate this many lines (include in test page).  
                  %  
HLC\_HEADLB     %,  
                  = HLC[6]    !Skip this many lines before the header.  
                  %  
HLC\_NO\_NUMBER    %,  
                  = HLC[7]    !Smallest .HL number for which to leave the header  
                  !unnumbered.  
                  %  
HLC\_HEADSP     %,  
                  = HLC[8]    !Number of spaces after the section number.  
                  %  
HLC\_CENTER     %,  
                  = HLC[9]    !Smallest .HL number for which to center the header  
                  !(if header is not run-in).  
                  %  
LITERAL        HLC\_SIZE    = 10;    !Number of cells in the HLC.  
MACRO            HLC\_CO\_BLD = (HLC\_CO\_NBITS)<BLD\_\_> !Carry over bolding to subtitles.  
                  %  
                  HLC\_CO\_UND = (HLC\_CO\_NBITS)<UND\_\_> !Carry over underlining to subtitles.  
                  %  
                  HLC\_CO\_OVR = (HLC\_CO\_NBITS)<OVR\_\_> !Carry over overstriking to subtitles.  
                  %  
MACRO            HLC\_DEFINITION =  
                  VECTORE[HLC\_SIZE];  
                  %  
                  !  
                  End of HLC.REQ

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

D 6  
15-Sep-1984 23:07:40  
15-Sep-1984 22:50:43

VAX-11 BLiss-32 V4.0-742  
\_S255SDUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 103  
(2)

; 2781 0 REQUIRE 'REQ:IFSTK.REQ'; ! IFSTK\_... stack for nested .IFs

R2782 0  
R2783 0  
R2784 0  
R2785 0  
R2786 0  
R2787 0  
R2788 0  
R2789 0  
R2790 0  
R2791 0  
R2792 0  
R2793 0  
R2794 0  
R2795 0  
R2796 0  
R2797 0  
R2798 0  
R2799 0  
R2800 0  
R2801 0  
R2802 0  
R2803 0  
R2804 0  
R2805 0  
R2806 0  
R2807 0  
R2808 0  
R2809 0  
R2810 0  
R2811 0  
R2812 0  
R2813 0  
R2814 0  
R2815 0  
R2816 0  
R2817 0  
R2818 0  
R2819 0  
R2820 0  
R2821 0  
R2822 0  
R2823 0  
R2824 0  
R2825 0  
R2826 0  
R2827 0  
R2828 0  
R2829 0  
R2830 0  
R2831 0  
R2832 0  
R2833 0  
R2834 0  
R2835 0  
R2836 0  
R2837 0  
R2838 0

| Version: 'V04-000'

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|++ FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

| ABSTRACT:  
| Definitions related to the IF stack, for nested .IF commands.

| ENVIRONMENT: Transportable BLISS

| AUTHOR: Rich Friday

| CREATION DATE: 1978

| MODIFIED BY:

| 002 KAD00002 Keith Dawson 07-Mar-1983  
| Global edit of all modules. Updated module names, idents,  
| copyright dates. Changed require files to BLISS library.

--  
| LITERAL

| IFSTK\_SIZE = 10. | Up to 10 levels of .IFs.  
| IFSTK\_DEPTH = -1. | Index into the IFSTK where the current depth is saved.  
| IFSTK\_VR = 0. | Index to VRxxxx information.  
| IFSTK\_BOOL = 1. | Logical value in effect at this time.  
| IFSTK\_SOURCE = 2. | The handler code of the command that made this entry.  
| IFSTK\_REQ\_D = 3. | .REQUIRE depth at which .IT must terminate.  
| IFSTK\_IPAGEN = 4. | Input file page number.  
| IFSTK\_ISEQN = 5. | Input file sequence number.  
| IFSTK\_FLAG = 6. | The /DRAFT flag that was interrupted.

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

F 6  
15-Sep-1984 23:07:40  
15-Sep-1984 22:52:26

VAX-11 Bliss-32 V4.0-742  
S255\$DUA28:[RUNOFF.SRC]IFSTK.REQ;1

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(1)

R2839 0 IFSTK\_ELSE\_FLG = 7; ! The /DRAFT flag for the .else branch.  
R2840 0  
R2841 0  
R2842 0  
R2843 0  
R2844 2  
R2845 2  
R2846 0  
R2847 0  
R2848 0

STRUCTURE

IFSTACK[I..J:N=IFSTK\_SIZE] =  
[%UPVAL\*(B+N+1+8)] ! Leave room for the 0th nesting level.  
(IFSTACK + (If J eql IFSTK\_DEPTH  
then 0  
else %UPVAL\*(1+B\*I+J) ) );

End of IFSTK.REQ

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

6 6  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 v4.0-742  
15-Sep-1984 22:50:43 \$255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 106  
(2)

: 2849 0 REQUIRE 'REQ:INDEX.REQ'; ! Structures used by the indexing command

R2850 0  
R2851 0 Version: 'V04-000'  
R2852 0  
R2853 0 \*\*\*\*\*  
R2854 0 \*  
R2855 0 \* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY  
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R2872 0 \*  
R2873 0 \*  
R2874 0 \*\*\*\*\*\*  
R2875 0  
R2876 0  
R2877 0 ++  
R2878 0 FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
R2879 0  
R2880 0 ABSTRACT:  
R2881 0 Structures for use by the indexing command.  
R2882 0  
R2883 0 ENVIRONMENT: Transportable BLISS  
R2884 0  
R2885 0 AUTHOR: Rich Friday  
R2886 0  
R2887 0 CREATION DATE: 1978  
R2888 0  
R2889 0 MODIFIED BY:  
R2890 0  
R2891 0 002 KAD00002 Keith Dawson 07-Mar-1983  
R2892 0 Global edit of all modules. Updated module names, idents,  
R2893 0 copyright dates. Changed require files to BLISS library.  
R2894 0  
R2895 0  
R2896 0  
LR2897 0 XIF  
LR2898 0 2\*\$BPADDR LEQ \$BPVAL !Can addresses be packed in a word?  
UR2899 0 XTHEN  
UR2900 0 ! Structure of index entry (DECsystem-10/20).  
UR2901 0 MACRO  
UR2902 0 X\_PREV = 0,0 18,0 %, !Link to previous item (HALF WORD)  
UR2903 0 X\_NEXT = 0,18,18,0 %, !Link to next item (0 ==> EOL) (HALF WORD)  
UR2904 0 X\_SUBX = 1,0 18,0 %, !Sub index pointer (HALF WORD)  
UR2905 0 X\_SIBC = 1,18,8,0 %, !Sub index level (BYTE)  
UR2906 0 X\_BARS = 1,26,1,0 %, !Change bar flag (BIT)

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

I 6  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 V4.0-742  
15-Sep-1984 22:52:30 \$255\$DUA28:[RUNOFF.SRC]INDEX.REQ;1 Page 108  
(1)

UR2907 0 X\_REF = 3,0,18,0 %; !Extra reference pointer (HALF WORD)  
UR2908 0 X\_TEXT = 2,18,18,0 %; !Pointer to text of index item (HALF WORD)  
UR2909 0  
UR2910 0  
UR2911 0 LITERAL  
UR2912 0 X\_ENTRY = 3; !Number of words in index entry.  
UR2913 0 ! Structure of extra reference entry (DECsystem-10/20).  
UR2914 0 MACRO  
UR2915 0 XX\_LINK = 0,0,18,0 %; !Pointer to additional entries.  
UR2916 0 XX\_PAGE = 0,18,18,1 %; !Transaction number.  
UR2917 0  
UR2918 0 LITERAL  
UR2919 0 XX\_ENTRY= 1; !Length of extra reference entry.  
UR2920 0  
UR2921 0  
R2922 0 XELSE  
R2923 0 ! Structure of index entry for -11s, VAXes, and -20s with extended addressing.  
R2924 0 MACRO  
R2925 0 X\_PREV = 0,0,%BPVAL,0 %; !Link to previous item (WORD)  
R2926 0 X\_NEXT = 1,0,%BPVAL,0 %; !Link to next item (0 ==> EOL) (WORD)  
R2927 0 X\_SUBX = 2,0,%BPVAL,0 %; !Sub index pointer (WORD)  
R2928 0 X\_SUBC = 3,0,8,0 %; !Sub index level (BYTE)  
R2929 0 X\_BARS = 3,8,1,0 %; !Change bar flag (BIT)  
R2930 0 X\_REF = 4,0,%BPVAL,0 %; !Extra reference pointer (WORD)  
R2931 0 X\_TEXT = 5,0,%BPVAL,0 %; !Pointer to text of index item (WORD)  
R2932 0  
R2933 0 LITERAL  
R2934 0 X\_ENTRY = 6; !Number of words in index entry.  
R2935 0  
R2936 0 ! Structure of extra reference entry (-11s, VAXes, -20 with extended addressing).  
R2937 0 MACRO  
R2938 0 XX\_LINK = 0,0,%BPVAL,0 %; !Pointer to additional entries.  
R2939 0 XX\_PAGE = 1,0,%BPVAL,1 %; !Transaction number.  
R2940 0  
R2941 0 LITERAL  
R2942 0 XX\_ENTRY= 2; !Length of extra reference entry.  
R2943 0 XFI  
R2944 0  
R2945 0 !Dummy datasets  
R2946 0 LITERAL  
R2947 0 DS\_X\_ENTRY=X\_ENTRY,  
R2948 0 DS\_XX\_ENTRY=XX\_ENTRY,  
R2949 0 DS\_X\_STRING=0;  
R2950 0  
R2951 0 ! End of INDEX.REQ

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

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15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742  
S255\$DUA2\$:[RUNOFF.SRC]DSRLIB.REQ;1

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(2)

: 2952 0 REQUIRE 'REQ:IRAC.REQ'; ! IRAC\_... structure Macros & literal

R2953 0 IRAC.REQ Macros, literals, and structures defining the IRAC.  
R2954 0 Version: 'V04-000'  
\*\*\*\*\*  
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R2976 0 \*  
R2977 0 \*  
R2978 0 \* \*\*\*\*\*  
R2979 0 \*  
R2980 0 \*\*  
R2981 0 \* FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
R2982 0 \*  
R2983 0 \* ABSTRACT:  
R2984 0 \* Macros, literals, and structures defining the IRAC (Input Record  
R2985 0 \* Area).  
R2986 0 \*  
R2987 0 \* ENVIRONMENT: Transportable BLISS  
R2988 0 \*  
R2989 0 \* AUTHOR: Rich Friday  
R2990 0 \*  
R2991 0 \* CREATION DATE: 1978  
R2992 0 \*  
R2993 0 \* MODIFIED BY:  
R2994 0 \*  
R2995 0 \* 004 KAD00004 Keith Dawson 07-Mar-1983  
R2996 0 \* Global edit of all modules. Updated module names, idents,  
R2997 0 \* copyright dates. Changed require files to BLISS library.  
R2998 0 \*  
R2999 0 \*--  
R3000 0 \*  
R3001 0 \*  
R3002 0 \*  
R3003 0 \* MACRO  
R3004 0 \* IRAC\_BARS = (IRAC[ 00 ])<BAR .% !TRUE if this line is marked with change bars.  
R3005 0 \* IRAC\_SEQN FLAG = IRAC[ 01 ].% !TRUE if ISEQN is an SOS style line number.  
R3006 0 \* IRAC\_ISEQN = IRAC[ 02 ].% Input line number or sequence number.  
R3007 0 \* IRAC\_IPAGEN = IRAC[ 03 ].% Input page number.  
R3008 0 \* IRAC\_FSPEC\_P = IRAC[ 04 ].% CHSPTR to the file-spec  
R3009 0 \* IRAC\_FSPEC\_C = IRAC[ 05 ].% Number characters in the file-spec  
R3009 0 \* IRAC\_DRAFT\_FLG = IRAC[ 06 ].% TRUE/FALSE flag for /DRAFT.

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

L6  
15-Sep-1984 23:07:40  
15-Sep-1984 22:52:35

VAX-11 Bliss-32 V4.0-742  
S255\$DUA28:[RUNOFF.SRC]IRAC.REQ;1

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(1)

R3010 0  
R3011 0  
R3012 0  
R3013 0  
R3014 0  
MR3015 0  
R3016 0  
R3017 0  
R3018 0

LITERAL    IRAC\_SIZE       = 7;                  !Number of elements in IRAC.  
MACRO      IRAC\_DEFINITION =  
              VECTOR[IRAC\_SIZE];  
              !    End of IRAC.REQ

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

M 6  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 V4.0-742  
15-Sep-1984 22:50:43 \_\$255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 112 (2)

: 3019 0 REQUIRE 'REQ:KC.REQ'; ! Definition of macros: KCNS, KCS, & TISF

R3020 0  
R3021 0 Version: 'V04-000'  
R3022 0  
R3023 0 \*\*\*\*\*  
R3024 0 \*  
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R3044 0 \*\*\*\*\*  
R3045 0  
R3046 0  
R3047 0 \*\*  
R3048 0 FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
R3049 0  
R3050 0 ABSTRACT:  
R3051 0 Defines macros for reading a single character from input.  
R3052 0  
R3053 0 ENVIRONMENT: Transportable BLISS  
R3054 0  
R3055 0 AUTHOR: Rich Friday  
R3056 0  
R3057 0 CREATION DATE: 1978  
R3058 0  
R3059 0 MODIFIED BY:  
R3060 0  
R3061 0 002 KAD00002 Keith Dawson 07-Mar-1983  
R3062 0 Global edit of all modules. Updated module names, idents,  
R3063 0 copyright dates. Changed require files to BLISS library.  
R3064 0  
R3065 0 --  
R3066 0  
R3067 0 KCNS reads a character and advances the cursor. Substitution, as indicated  
R3068 0 by the presence of the Substitute flag, is never performed.  
R3069 0  
R3070 0 MACRO  
MR3071 0 kcns( ) =  
MR3072 0 (IF .fs\_length (ira) LEQ 0  
MR3073 0 THEN  
MR3074 0 BEGIN  
MR3075 0 EXTERNAL LITERAL  
MR3076 0 rintes : UNSIGNED (B);

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

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15-Sep-1984 23:07:40  
15-Sep-1984 22:52:39

VAX-11 Bliss-32 v4.0-742  
S255SDUA28:[RUNOFF.SRC]KC.REQ;1

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(1)

```
MR3077 0
MR3078 0
MR3079 0
MR3080 0
MR3081 0
R3082 0
R3083 0
R3084 0
R3085 0
R3086 0
R3087 0
MR3088 0
MR3089 0
MR3090 0
MR3091 0
MR3092 0
MR3093 0
MR3094 0
MR3095 0
MR3096 0
MR3097 0
MR3098 0
R3099 0
R3100 0
R3101 0
R3102 0
R3103 0
R3104 0
MR3105 0
MR3106 0
MR3107 0
MR3108 0
MR3109 0
MR3110 0
R3111 0
R3112 0
R3113 0

    khar = rintes;
    fs_length (ira) = -1;
    END
    ELSE
        fs_rchar (ira,khar)
    %

! KCS reads a character; it calls SUBST if the character read is the
! Substitute flag and recognition of the Substitute flag is enabled.

MACRO
    kcs( )      =
    BEGIN
        EXTERNAL khar;
        EXTERNAL ROUTINE subst;
        kcns();
        !*****Temporarily turned off
        IF tisf (.khar)
        THEN
            subst ();
        !*****End of temporarily turned off
        END
    %

! TISF returns the value TRUE if KHAR contains the Substitute flag, and
! recognition of the Substitute flag is enabled.

MACRO
    tisf (khar) =
        (.flgt [sub_flag,flag_enabled]
         AND
         .sca_flags
         AND
         (khar EQL .flgt [sub_flag,flag_character])) ! Right character?
    %

! End of KC.REQ
```

**FLIPRECS** -- FLIP/RUNOFF record formats  
**TOCHL** -- HL indicator record

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15-Sep-1984 23:07:40 VAX-11 Bliss-32 V4.0-742 Page 115  
15-Sep-1984 22:50:43 \$255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 (2)

```
3114 0
U 3115 0 XIF DSRPLUS %THEN
U 3116 0 REQUIRE 'REQ:KEYWORD.REQ'; ! Keyword-table definitions
U 3117 0 XFI
U 3118 0
3119 0 REQUIRE 'REQ:KWITEM.REQ'; ! Macros to access command-keyword fields
```

R3120 0  
R3121 0 Version: 'V04-000'  
R3122 0  
R3123 0  
R3124 0  
R3125 0 \*\*\*\*\*  
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R3142 0 SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.  
R3143 0 \*\*\*\*\*  
R3144 0 \*\*\*\*\*  
R3145 0 |++  
R3146 0 |FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
R3147 0 |ABSTRACT: Defines macros for fields of key word entries.  
R3148 0 |ENVIRONMENT: Transportable BLISS  
R3149 0 |AUTHOR: Rich Friday CREATION DATE: 1978  
R3150 0  
R3151 0  
R3152 0  
R3153 0  
R3154 0  
R3155 0

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

E 7  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 v4.0-742  
15-Sep-1984 22:52:44 \$255\$DUA28:[RUNOFF.SRC]KWITEM.REQ;1 Page 117  
(2)

R3156 0  
R3157 0  
R3158 0  
R3159 0  
R3160 0  
R3161 0  
R3162 0  
R3163 0  
R3164 0  
R3165 0  
R3166 0  
R3167 0

| MODIFIED BY:

- 005 RER00005 Ron Randall 17-Mar-1983  
Changed iih to ift to better reflect its topnote function.
- 004 RER00004 Ron Randall 07-Mar-1983  
Global edit of all modules. Updated module names, idents,  
copyright dates. Changed require files to BLISS library.  
Changed all <macro name>s to kwitem\_<macro\_name> to avoid  
conflict with LP1.BLI.
-

R3168 0 MACRO  
R3169 0 | Length of keyword.  
R3170 0 item\_length (item) =  
R3171 0 | BEGIN  
R3172 0 BIND x = .item [0]: VECTOR;  
R3173 0 x [0]  
R3174 0 END %.  
R3175 0  
R3176 0  
R3177 0  
R3178 0 | Address of keyword, CHSPTR.  
R3179 0 p\_word (item) =  
R3180 0 | BEGIN  
R3181 0 BIND x = .item [0]: VECTOR;  
R3182 0 x [1]  
R3183 0 END %.  
R3184 0  
R3185 0  
R3186 0 | Handler code.  
R3187 0 kwitem\_handler\_code (item) = item [1] %.  
R3188 0  
R3189 0  
R3190 0 | Same field does double duty.  
R3191 0 kwitem\_next\_list (item) = item [1] %.  
R3192 0  
R3193 0  
R3194 0 | All options collectively.  
R3195 0 kwitem\_actions (item) = item [2] %.  
R3196 0  
R3197 0  
R3198 0 | TRUE if keyword chain continues.  
R3199 0 kwitem\_chain\_continues (item) = (item [2]) <8, 1> %.  
R3200 0  
R3201 0  
R3202 0 | TRUE if a defined abbreviation.  
R3203 0 kwitem\_abbreviation (item) = (item [2]) <9, 1> %.  
R3204 0  
R3205 0  
R3206 0 | TRUE for commands related to .IF.  
R3207 0 kwitem\_rif (item) = item <10, 1> %.  
R3208 0  
R3209 0 | TRUE if illegal in a footnote.  
R3210 0 kwitem\_iff (item) = item <11, 1> %.  
R3211 0  
R3212 0  
R3213 0 | TRUE if waiting text to be forced out.  
R3214 0 kwitem\_do\_outnj (item) = item <12, 1> %.  
R3215 0  
R3216 0 | TRUE if command has a numerical argument.  
R3217 0 kwitem\_do\_getnum (item) = item <13, 1> %.  
R3218 0  
R3219 0  
R3220 0 | TRUE if illegal in a topnote.  
R3221 0 kwitem\_fif (item) = item <14, 1> %.  
R3222 0  
R3223 0  
R3224 0

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

6 7  
15-Sep-1984 23:07:40    15-Sep-1984 22:52:44  
VAX-11 Bliss-32 V4.0-742  
\_S255\$DUA28:[RUNOFF.SRC]KWITEM.REQ;1 Page 119  
(3)

R3225 0      ! Minimum number of characters for a match.  
R3226 0  
R3227 0  
R3228 0      kwitem\_minimum\_match (item) = (item [2]) <0, 8> %;  
R3229 0  
R3230 0      ! End of KWITEM.REQ

**FLIPRECS** -- FLIP/RUNOFF record formats  
**TOCHL** -- HL indicator record

H 7  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 V4.0-742 Page 120  
15-Sep-1984 22:50:43 \$255\$DUA2B:[RUNOFF.SRC]DSRLIB.REQ;1 (2)

3231 0  
3232 0  
3233 0  
3234 0  
3235 0  
3236 0  
3237 0  
3238 0  
3239 0  
3240 0

XIF DSRPLUS %THEN  
REQUIRE 'REQ:KWS.REQ';  
REQUIRE 'REQ:KWSCON.REQ';  
REQUIRE 'REQ:KWSTYL.REQ';  
REQUIRE 'REQ:KWTDEF.REQ';  
REQUIRE 'REQ:KWXPYP.REQ';  
XFI  
REQUIRE 'REQ:LETTER.REQ';

! Definitions for the Attribute Keyword Structure  
! Definitions for .SEND CONTENTS keywords  
! KWSS... keyword definitions for .STYLE <:fit:h>  
! KWSPDP... KWSPDM keyword definitions for S\$entities  
! KWX... keyword definitions for .XP, .YP, .ENA XP

! Alpha testing and case changing macros

R3241 0  
R3242 0  
R3243 0  
R3244 0  
R3245 0  
R3246 0  
R3247 0  
R3248 0  
R3249 0  
R3250 0  
R3251 0  
R3252 0  
R3253 0  
R3254 0  
R3255 0  
R3256 0  
R3257 0  
R3258 0  
R3259 0  
R3260 0  
R3261 0  
R3262 0  
R3263 0  
R3264 0  
R3265 0  
R3266 0  
R3267 0  
R3268 0  
R3269 0  
R3270 0  
R3271 0  
R3272 0  
R3273 0  
R3274 0  
R3275 0  
R3276 0  
R3277 0  
R3278 0  
R3279 0  
R3280 0  
R3281 0  
R3282 0  
R3283 0  
R3284 0  
R3285 0  
R3286 0  
R3287 0  
R3288 0  
R3289 0  
MR3290 0  
MR3291 0  
R3292 0  
R3293 0  
MR3294 0  
MR3295 0  
R3296 0  
R3297 0

Version: 'V04-000'  
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\*\*\*\*\*  
\*+  
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
ABSTRACT:  
Macros to test if a character is an appropriately flavored letter,  
and macros to convert between upper and lower case.  
ENVIRONMENT: Transportable BLISS  
AUTHOR: Rich Friday  
CREATION DATE: 1978  
MODIFIED BY:  
002 KAD00002 Keith Dawson 07-Mar-1983  
Global edit of all modules. Updated module names, idents,  
copyright dates. Changed require files to BLISS library.  
!--  
MACRO  
upper letter (khar) = ! See if upper case letter  
(khar GEQ XC'A' AND khar LEQ XC'Z')  
z,  
lower letter (khar) = ! See if lower case letter  
(khar GEQ XC'a' AND khar LEQ XC'z')  
z,

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

15-Sep-1984 23:07:40  
15-Sep-1984 22:52:49

VAX-11 Bliss-32 v4.0-742  
S255\$DUA28:[RUNOFF.SRC]LETTER.REQ;1

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(1)

MR3298 0      letter (khar)      ! See if any type of letter  
MR3299 0      (upper\_letter (khar)) OR lower\_letter (khar)  
%:  
MACRO  
  upper\_case (khar) =  
    (Khar + %C'A' - %C'a')      ! Convert to upper case  
%:  
  lower\_case (khar) =  
    (Khar + %C'a' - %C'A')      ! Convert to lower case  
%:  
R3311 0      ! End of LETTER.REQ

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

K 7  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 V4.0-742  
15-Sep-1984 22:50:43 \_\$255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 123  
(2)

: 3312 0 REQUIRE 'REQ:LODEFs.REQ'; ! Literal definitions of LSTOPs operations

R3313 0  
R3314 0  
R3315 0  
R3316 0  
R3317 0  
R3318 0  
R3319 0  
R3320 0  
R3321 0  
R3322 0  
R3323 0  
R3324 0  
R3325 0  
R3326 0  
R3327 0  
R3328 0  
R3329 0  
R3330 0  
R3331 0  
R3332 0  
R3333 0  
R3334 0  
R3335 0  
R3336 0  
R3337 0  
R3338 0  
R3339 0  
R3340 0  
R3341 0  
R3342 0  
R3343 0  
R3344 0  
R3345 0  
R3346 0  
R3347 0  
R3348 0  
R3349 0  
R3350 0  
R3351 0  
R3352 0  
R3353 0  
R3354 0  
R3355 0  
R3356 0  
R3357 0  
R3358 0  
R3359 0  
R3360 0  
R3361 0  
R3362 0  
R3363 0  
R3364 0  
R3365 0  
R3366 0  
R3367 0  
R3368 0  
R3369 0

LODEFS.REQ Define function literals for LSTOPPS.BLI

Version: 'V04-000'

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++  
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:

This file contains a list of operation codes that control which special  
listing functions are processed by LSTOPPS.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

005 REM00005 Ray Marshall 17-May-1984  
Added support for /DEC\_INTERNAL:OUTPUT\_LINE\_NUMBER.  
Removed LSTOPPS\_BARS because it is no longer referenced.

004 KAD00004 Keith Dawson 07-Mar-1983  
Global edit of all modules. Updated module names, idents,  
copyright dates. Changed require files to BLISS library.

--

LITERAL LSTOPPS\_NONE = 0. !Don't do any at all.  
LSTOPPS\_ALL !Do all requested options.

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

H 7  
15-Sep-1984 23:07:40  
15-Sep-1984 22:52:53

VAX-11 Bliss-32 V4.0-742  
\_S255\$DUA28:[RUNOFF.SRC]LODEF.S.REQ;1

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(1)

R3370 0  
R3371 0  
R3372 0  
R3373 0  
R3374 0  
R3375 0  
R3376 0  
R3377 0  
R3378 0  
R3379 0  
R3380 0  
R3381 0

= 1^BPOSIT(BAR-- ) + |Change bars  
1^BPOSIT(CND-- ) + |/DEBUG:CONDITIONALS  
1^BPOSIT(ISQ-- ) + |/SEQUENCE  
1^BPOSIT(OSQ-- ) + |/DEC INTERNAL:OUTPUT\_LINE\_NUMBER  
1^BPOSIT(RIT-- ), !/RIGHT

! And for blank lines:

LSTOPs\_NO\_ISEQN = 1^BPOSIT(BAR-- ) + |Everything except /SEQUENCE  
1^BPOSIT(CND-- ) + |Change bars  
1^BPOSIT(RIT-- ); |/RIGHT

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

N 7  
15-Sep-1984 23:07:40  
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742  
\_S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 126  
(2)

: 3382 0 REQUIRE 'REQ:MSG.REQ'; ! Macros used in error messages

R3383 0  
R3384 0 Version: 'V04-000'  
R3385 0 \*\*\*\*\*  
R3386 0 \*  
R3387 0 \* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY  
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R3405 0 \*  
R3406 0 \*  
R3407 0 \*  
R3408 0 \*  
R3409 0 \*  
R3410 0 \*++  
R3411 0 \* FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
R3412 0 \*  
R3413 0 \* ABSTRACT:  
R3414 0 \* Defines macros used by error-message processing.  
R3415 0 \*  
R3416 0 \* ENVIRONMENT: Transportable BLISS  
R3417 0 \*  
R3418 0 \* AUTHOR: Rich Friday  
R3419 0 \*  
R3420 0 \* CREATION DATE: 1978  
R3421 0 \*  
R3422 0 \* MODIFIED BY:  
R3423 0 \*  
R3424 0 \* 002 KAD00002 Keith Dawson 07-Mar-1983  
R3425 0 \* Global edit of all modules. Updated module names, idents,  
R3426 0 \* copyright dates. Changed require files to BLISS library.  
R3427 0 \*--  
R3428 0 \*  
R3429 0 \*  
R3430 0 \*  
MR3431 0 \* MACRO  
MR3432 0 \* msg (l, s) =  
MR3433 0 \* BEGIN  
MR3434 0 \* EXTERNAL ROUTINE  
MR3435 0 \* filout;  
MR3436 0 \* XIF XLENGTH EQL 1  
MR3437 0 \* XTHEN filout (-1, XCHARCOUNT(l), CHSPTR(UPLIT(l)))  
MR3438 0 \* XELSE  
MR3439 0 \*

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

15-Sep-1984 23:07:40  
15-Sep-1984 22:53:08  
VAX-11 Bliss-32 v4.0-742  
S255\$DUA28:[RUNOFF.SRC]MSG.REQ;1

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(1)

MR3440 0  
MR3441 0  
MR3442 0  
R3443 0  
R3444 0  
R3445 0  
MR3446 0  
MR3447 0  
R3448 0  
R3449 0  
R3450 0  
MR3451 0  
MR3452 0  
R3453 0  
R3454 0  
MR3455 0  
MR3456 0  
R3457 0  
R3458 0  
R3459 0

      filout (-1, l, s)  
      ZFI  
      END  
      %;  
MACRO  
      ermsg (s)=  
      CHSPTR ( UPLIT (%STRING(%CHAR(%CHARCOUNT (s)),s)) )  
      %;  
MACRO  
      bell =  
      %CHAR(%'07')  
      %,  
      del =  
      %CHAR(%'177')  
      %;  
      ;  
                End of MSG.REQ

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

15-Sep-1984 23:07:40  
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742  
\_S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1

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(2)

: 3460 0 REQUIRE 'REQ:NDXRTY.REQ'; ! .BIX-format binary file record definitions

R3461 0  
R3462 0  
R3463 0  
R3464 0  
R3465 0  
R3466 0  
R3467 0  
R3468 0  
R3469 0  
R3470 0  
R3471 0  
R3472 0  
R3473 0  
R3474 0  
R3475 0  
R3476 0  
R3477 0  
R3478 0  
R3479 0  
R3480 0  
R3481 0  
R3482 0  
R3483 0  
R3484 0  
R3485 0  
R3486 0  
R3487 0  
R3488 0  
R3489 0  
R3490 0  
R3491 0  
R3492 0  
R3493 0  
R3494 0  
R3495 0  
R3496 0  
R3497 0  
R3498 0  
R3499 0  
R3500 0  
R3501 0  
R3502 0  
R3503 0  
R3504 0  
R3505 0  
R3506 0  
R3507 0  
R3508 0  
R3509 0  
R3510 0  
R3511 0  
R3512 0  
R3513 0  
R3514 0  
R3515 0  
R3516 0  
R3517 0

| Version: 'V04-000'

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|++  
| FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

| ABSTRACT:

| This file contains literals and macros defining Index record groups  
| found in either a .BIX or .BRN file.

| ENVIRONMENT: Transportable BLISS

| AUTHOR: J.P. Kellerman

| CREATION DATE: January 1982

| MODIFIED BY:

| 003 KAD00003 Keith Dawson 07-Mar-1983  
| Global edit of all modules. Updated module names, idents,  
| copyright dates. Changed require files to BLISS library.

|--  
| An Index Record Group consists of an identification code stored  
| in the lower half of the first fullword followed by zero or more  
| fullwords which make up the rest of the record group.

| LITERAL

| NEW SEQUENCE = 1,  
| INDEX\_XTN = 2,  
| INDEX\_ENTRY = 3,

| Index Record Group Identification codes are:  
| New File Group.  
| Page Number Transaction Record Group.  
| Index Entry Record Group.

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

F 8  
15-Sep-1984 23:07:40    VAX-11 Bliss-32 v4.0-742  
15-Sep-1984 22:53:28    \_\$255\$DUA28:[RUNOFF.SRC]NDXRTY.REQ;1

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(1)

: R3518 0      INDEX\_ATTRIBUTES = 4;      ! XPLUS-YPLUS Index Entry Attributes Record Group  
: R3519 0      ! (.BRN files only).  
: R3520 0  
: R3521 0      !  
:              End of NDXRTY.REQ

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

6 8  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 V4.0-742  
15-Sep-1984 22:50:43 \_\$255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 132  
(2)

: 3522 0  
U 3523 0  
: 3524 0  
: 3525 0  
: 3526 0  
: 3527 0

%IF DSRPLUS %THEN  
REQUIRE 'REQ:NDXXPL.REQ'; ! .XPLUS attribute-structure record definitions  
%FI  
REQUIRE 'REQ:NMLST.REQ'; ! NMLST\_..., NM\_..., and NUMBER\_LIST

R3528 0  
R3529 0  
R3530 0  
R3531 0  
R3532 0  
R3533 0  
R3534 0  
R3535 0  
R3536 0  
R3537 0  
R3538 0  
R3539 0  
R3540 0  
R3541 0  
R3542 0  
R3543 0  
R3544 0  
R3545 0  
R3546 0  
R3547 0  
R3548 0  
R3549 0  
R3550 0  
R3551 0  
R3552 0  
R3553 0  
R3554 0  
R3555 0  
R3556 0  
R3557 0  
R3558 0  
R3559 0  
R3560 0  
R3561 0  
R3562 0  
R3563 0  
R3564 0  
R3565 0  
R3566 0  
R3567 0  
R3568 0  
R3569 0  
R3570 0  
R3571 0  
R3572 0  
R3573 0  
R3574 0  
R3575 0  
R3576 0  
R3577 0  
R3578 0  
R3579 0  
R3580 0  
R3581 0  
R3582 0  
R3583 0  
R3584 0

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\* FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

\* ABSTRACT:  
\* Definitions pertaining to lists of numbers picked up by GLNM.

\* ENVIRONMENT: Transportable BLISS

\* AUTHOR: Rich Friday

\* CREATION DATE: 1978

\* MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983  
Global edit of all modules. Updated module names, idents,  
copyright dates. Changed require files to BLISS library.

--  
\* LITERAL

NMLST\_\_COUNT = 1; !The number of numbers found.  
NMLST\_\_VALUE = 2; !The values of the numbers.  
NMLST\_\_DESCR = 3; !What the numbers looked like.

LITERAL

NMLST\_MAXSIZE = 40;

STRUCTURE

NUMBER\_LIST[I,Attribute;Length=NMLST\_MAXSIZE] =

```
R3585 0
R3586 0
R3587 1
R3588 1
R3589 1
R3590 1
R3591 2
R3592 3
R3593 4
R3594 0
R3595 0
R3596 0
R3597 0
R3598 0
R3599 0
R3600 0
R3601 0
R3602 0
R3603 0
R3604 0
R3605 0
R3606 0
R3607 0
R3608 0
R3609 0
R3610 0

[ %UPVAL*( 2*length + 1 ) ]
( If Attribute eql NMLST__COUNT
  then
    NUMBER_LIST
  else
    (NUMBER_LIST + %UPVAL*1 +
      (if Attribute eql NMLST__VALUE
        then %UPVAL*{ i - 1 }
        else %UPVAL*{ i - 1 + Length } ));

! Names for NMLST_DESCRIPTOR things.

LITERAL
  NM_NULL      = 0;      ! No number given.
  NM_UNSIGNED  = 1;      ! Number was unsigned.
  NM_PLUS       = 2;      ! A '+' preceeded the number.
  NM_MINUS     = 3;      ! A '-' preceeded the number.
  NM_BAD        = 4;      ! The number was in error.

MACRO
  NMLST_COUNT   = NMLST [0,NMLST__COUNT]%
  NMLST_VALUE (I) = NMLST [I,NMLST__VALUE]%
  NMLST_DESCR (I) = NMLST [I,NMLST__DESCR]%

!
End of NMLST.REQ
```

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

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(2)

: 3611 0 REQUIRE 'REQ:NUMPRM.REQ'; ! NUM\_... values returned from GETNUM

R3612 0  
R3613 0 Version: 'V04-000'  
R3614 0  
R3615 0 \*\*\*\*\*  
R3616 0 \*  
R3617 0 \* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY  
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R3632 0 \* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS  
R3633 0 \* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.  
R3634 0 \*  
R3635 0 \*  
R3636 0 \*  
R3637 0 \*  
R3638 0 \*  
R3639 0 \*  
R3640 0 \*+ FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
R3641 0  
R3642 0 ABSTRACT:  
R3643 0 This data structure is used to save results picked up by GETNUM.  
R3644 0  
R3645 0 ENVIRONMENT: Transportable BLISS  
R3646 0  
R3647 0 AUTHOR: Rich Friday  
R3648 0  
R3649 0 CREATION DATE: 1978  
R3650 0  
R3651 0 MODIFIED BY:  
R3652 0  
R3653 0 002 KAD00002 Keith Dawson 07-Mar-1983  
R3654 0 Global edit of all modules. Updated module names, idents,  
R3655 0 copyright dates. Changed require files to BLISS library.  
R3656 0  
R3657 0 --  
R3658 0  
R3659 0 MACRO  
MR3660 0 numprm define =  
MR3661 0 VECTOR [4]  
R3662 0 %.  
R3663 0  
MR3664 0 num\_result = !Completion code returned by GETNUM.  
MR3665 0 numprm [0] !See GETNUM.BLI for a description.  
R3666 0 %.  
R3667 0  
MR3668 0 num\_value =

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

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15-Sep-1984 22:53:41

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(1)

: MR3669 0      numprm [1]      !The value of the number processed.  
: R3670 0      %,  
: R3671 0  
: MR3672 0      num\_sign      =  
: MR3673 0      numprm [2]      !TRUE if the number was signed.  
: R3674 0      %,  
: R3675 0  
: MR3676 0      num\_length      =  
: MR3677 0      numprm [3]      !Number of digits scanned.  
: R3678 0      %;  
: R3679 0  
: R3680 0      !      End of NUMPRM.REQ

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

M 8

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\_S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1

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(2)

: 3681 0 REQUIRE 'REQ:OPDEV.REQ'; : OP\_DEV\_... literals: type of output device

R3682 0  
R3683 0 Version: 'V04-000'  
R3684 0  
R3685 0  
R3686 0  
R3687 0 \*\*\*\*\*  
R3688 0 \* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY  
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R3705 0 \*  
R3706 0 \*\*\*\*\*  
R3707 0  
R3708 0  
R3709 0  
R3710 0 \*\* FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
R3711 0  
R3712 0  
R3713 0 ABSTRACT:  
R3714 0 Defines the literals used to determine what the target device for the  
R3715 0 output file is.  
R3716 0 The field these literals are used with (OP DEVICE) is found in GCA.  
R3717 0 Its initial value is captured by the CLI, put into RNOMAC, and picked  
R3718 0 up later by DOOPTS to be put into GCA.  
R3719 0  
R3720 0 ENVIRONMENT: Transportable BLISS  
R3721 0  
R3722 0 AUTHOR: Ray Marshall  
R3723 0  
R3724 0 CREATION DATE: 7-January-1983  
R3725 0  
R3726 0  
R3727 0  
R3728 0 MODIFIED BY:  
R3729 0 004 KAD00004 Keith Dawson 11-May-1983  
R3730 0 Made FLIP output stream-format (with <cr><lf>).  
R3731 0 003 KAD00003 Keith Dawson 23-Mar-1983  
R3732 0 Added support for LN01E; put FLIP here as an output device  
R3733 0 type (instead of the bit GCA\_FLIP).  
R3734 0  
R3735 0 002 KAD00002 Keith Dawson 07-Mar-1983  
R3736 0 Global edit of all modules. Updated module names, idents,  
R3737 0 copyright dates. Changed require files to BLISS library.  
R3738 0

```
R3739 0 !--  
R3740 0  
R3741 0  
R3742 0 SLITERAL  
R3743 0     op_dev_line_printer = 0,      ! Output device is a...  
R3744 0     op_dev_first = %number($xpo$distinct), ! line-printer (default).  
R3745 0     op_dev_diablo = $DISTINCT,      ! Diablo-style terminal.  
R3746 0     op_dev_flip = $DISTINCT,       ! 'Electronic Book' output.  
R3747 0     op_dev_stream_output = %number($xpo$distinct),  
R3748 0     op_dev_vt100 = $DISTINCT,       ! VT100 terminal.  
R3749 0     op_dev_ln01 = $DISTINCT,       ! LN01 laser printer.  
R3750 0     op_dev_ln01e = $DISTINCT,      ! European-style LN01.  
R3751 0     op_dev_läst = %number($xpo$distinct);  
R3752 0  
MR3753 0 MACRO  
MR3754 0     op_dev_write_output_line =  
MR3755 0     NOTE: the following code depends on the output-device values in  
MR3756 0     OPDEV.REQ: specifically, on the fact that the stream-output,  
MR3757 0     bare-cr-emphasis devices (LP and Diablo) have device numbers  
MR3758 0     smaller than those of the escape-sequence-emphasis devices (LN01,  
MR3759 0     VT100). It is coded this way in the interest of efficiency: only  
MR3760 0     one fetch and compare is needed.  
MR3761 0     BEGIN  
MR3762 0     IF .gca_op_dev LEQ op_dev_stream_output  
MR3763 0     THEN  
MR3764 0     clh (clh_write_out)           ! LP and Diablo (STREAM) devices.  
MR3765 0     ELSE  
MR3766 0     clh (clh_out_nocrlf)        ! LN01 and VT100 (non-STREAM) devices.  
MR3767 0     END  
R3768 0     %:  
R3769 0     : End of OPDEV.REQ
```

FLIPRECS -- FLIP/RUNOFF record formats  
TOCML -- HL indicator record

{ 9  
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(2)

: 3770 0 REQUIRE 'REQ:OUTOPT.REQ'; ! OUTOPT\_... output control vector elements

R3771 0  
R3772 0  
R3773 0      Version: 'V04-000'  
R3774 0  
R3775 0  
R3776 0      \* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY  
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R3793 0  
R3794 0  
R3795 0  
R3796 0  
R3797 0  
R3798 0      ++  
R3799 0      FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
R3800 0  
R3801 0  
R3802 0      ABSTRACT:  
R3803 0      Options specifying final output generation.  
R3804 0  
R3805 0  
R3806 0      ENVIRONMENT: Transportable BLISS  
R3807 0  
R3808 0  
R3809 0  
R3810 0      AUTHOR: Rich Friday  
R3811 0  
R3812 0      CREATION DATE: 1978  
R3813 0  
R3814 0      MODIFIED BY:  
R3815 0  
R3816 0  
R3817 0  
R3818 0  
MR3819 0      003      KAD00003      Keith Dawson      07-Mar-1983  
R3820 0      Global edit of all modules. Updated module names, idents,  
R3821 0      copyright dates. Changed require files to BLISS library.  
R3822 0  
R3823 0  
R3824 0  
R3825 0  
MR3826 0      ---  
R3827 0  
MACRO  
outopt\_und\_char      = outopt[0]      ! Character to be used for underlining.  
outopt\_und\_nosp      = outopt[1]      ! True if the underlining character is non-spacing.  
outopt\_und\_sep      = outopt[2]      ! True if underlining is to be done by  
                        ! putting OUTOPT\_UND\_CHAR on the next line.  
outopt\_back      = outopt[3]      ! True if the backspace character is to be used.

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

E 9  
15-Sep-1984 23:07:40  
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\$255\$DUA28:[RUNOFF.SRC]OUTOPT.REQ;1

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(1)

```
: MR3828 0      outopt_over      = outopt[4]      ! TRUE if should do special functions
: R3829 0      %;                   ! by overprinting the same line.
: R3830 0      outopt_bldn     = outopt[5]      ! Amount of overstriking to be done when bolding.
: MR3831 0
: R3832 0
: R3833 0
: R3834 0
: R3835 0      LITERAL          outopt_size = 6;
: R3836 0
: R3837 0
: MR3838 0      MACRO            outopt define =
: MR3839 0      VECTOR [outopt_size]
: R3840 0      %;
: R3841 0
: R3842 0      !
:                         End of OUTOPT.REQ
```

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

F 9  
15-Sep-1984 23:07:40  
15-Sep-1984 22:50:43  
VAX-11 Bliss-32 V4.0-742  
\_S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 144  
(2)

: 3843 0 REQUIRE 'REQ:PASS.REQ'; ! PASS\_..., EMPH\_... definitions for final output

R3844 0  
R3845 0  
R3846 0  
R3847 0  
R3848 0  
R3849 0  
R3850 0  
R3851 0  
R3852 0  
R3853 0  
R3854 0  
R3855 0  
R3856 0  
R3857 0  
R3858 0  
R3859 0  
R3860 0  
R3861 0  
R3862 0  
R3863 0  
R3864 0  
R3865 0  
R3866 0  
R3867 0  
R3868 0  
R3869 0  
R3870 0  
R3871 0  
R3872 0  
R3873 0  
R3874 0  
R3875 0  
R3876 0  
R3877 0  
R3878 0  
R3879 0  
R3880 0  
R3881 0  
R3882 0  
R3883 0  
R3884 0  
R3885 0  
R3886 0  
R3887 0  
R3888 0  
R3889 0  
R3890 0  
R3891 0  
R3892 0  
R3893 0  
R3894 0  
R3895 0  
R3896 0  
R3897 0  
R3898 0  
R3899 0  
R3900 0

Version: 'V04-000'

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++  
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:

Literals for counting output passes in LOUT1.

ENVIRONMENT: Transportable BLISS

AUTHOR: Keith Dawson

CREATION DATE: March 1983

MODIFIED BY:

001 KAD00001 Keith Dawson 22-Mar-1983

--  
\* If no emphasis is present, the line is put out in 1 pass. This is also the  
case if we are generating VT100 output or FLIP output, or if the user said  
/BACKSPACE. If none of these cases applies, then multiple passes are needed  
to generate the built-up output line.

\* If any emphasis is present, the emphasized copies of the line are put out  
first; the "real," entire line is generated last. In this case, pass 1  
serves to set up the later passes, but does not produce output.

pass 1 - calculate pass 2 - bold  
pass 3 - underline pass 4 - bold-underline  
pass 5 - overstrike pass 6 - bold-overstrike

R3901 0 !- pass 7 - output line, if any emphasis was present

R3902 0

R3903 0

R3904 0

R3905 0

R3906 0

R3907 0

R3908 0

R3909 0

R3910 0

R3911 0

R3912 0

R3913 0

R3914 0

R3915 0

R3916 0

R3917 0

R3918 0

R3919 0

R3920 0

R3921 0

R3922 0

R3923 0

R3924 0

R3925 0

R3926 0

R3927 0

R3928 0

R3929 0

R3930 0

R3931 0

MR3932 0

MR3933 0

R3934 0

MR3935 0

MR3936 0

R3937 0

MR3938 0

MR3939 0

R3940 0

MR3941 0

MR3942 0

R3943 0

MR3944 0

MR3945 0

R3946 0

MR3947 0

MR3948 0

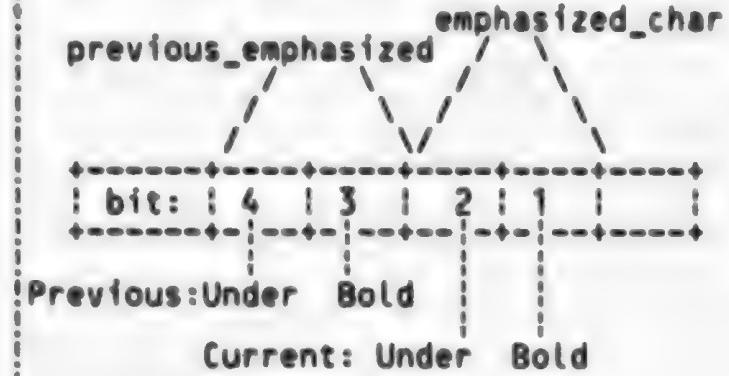
R3949 0

R3950 0

R3951 0

LITERAL  
pass\_setup = 1,  
pass\_bold = 2,  
pass\_underline=3,  
pass\_bold\_underline=4,  
pass\_overstrike = 5,  
pass\_bold\_overstrike = 6,  
pass\_real\_text = 7;

R3913 0 \* Arrangement of bits in EMPHASIS\_BITS:



R3929 0 MACRO

MR3932 0      emph\_current\_bold = ! TRUE if this character is bolded.  
MR3933 0      emphasis\_bits<1,1>  
R3934 0      %,  
MR3935 0      emph\_current\_underline = ! TRUE if this character is underlined.  
MR3936 0      emphasis\_bits<2,1>  
R3937 0      %,  
MR3938 0      emph\_current\_emphasized = ! Both bolding and underlining together.  
MR3939 0      emphasis\_bits<1,2>  
R3940 0      %,  
MR3941 0      emph\_previous\_bold = ! TRUE if last character output was bolded.  
MR3942 0      emphasis\_bits<3,1>  
R3943 0      %,  
MR3944 0      emph\_previous\_underline = ! TRUE if last character output was underlined.  
MR3945 0      emphasis\_bits<4,1>  
R3946 0      %,  
MR3947 0      emph\_previous\_emphasized = ! Both bits together.  
MR3948 0      emphasis\_bits<3,2>  
R3949 0      %  
R3950 0      ;

R3951 0 ! End of PASS.REQ

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

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15-Sep-1984 22:50:43

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\_S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1

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(2)

: 3952 0 REQUIRE 'REQ:PDT.REQ'; ! PDT\_... paragraph definition items

R3953 0  
R3954 0 Version: 'V04-000'  
R3955 0 \*\*\*\*\*  
R3956 0 \*  
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R3977 0 \*\*\*\*\*  
R3978 0  
R3979 0  
R3980 0 \*\*  
R3981 0 FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
R3982 0  
R3983 0 ABSTRACT:  
R3984 0 Items that define a paragraph.  
R3985 0  
R3986 0 ENVIRONMENT: Transportable BLISS  
R3987 0  
R3988 0 AUTHOR: Rich Friday  
R3989 0  
R3990 0 CREATION DATE: 1978  
R3991 0  
R3992 0 MODIFIED BY:  
R3993 0  
R3994 0 002 KAD00002 Keith Dawson 07-Mar-1983  
R3995 0 Global edit of all modules. Updated module names, idents,  
R3996 0 copyright dates. Changed require files to BLISS library.  
R3997 0  
R3998 0  
R3999 0  
R4000 0  
MR4001 0 MACRO  
R4002 0      pdt\_indent = pdt [00] ! Add this to .SCA\_RM at start of a paragraph.  
MR4003 0      pdt\_skip = pdt [01] ! Skip this many lines before starting.  
R4004 0      pdt\_tp = pdt [02] ! Do a test page before starting a paragraph.  
MR4005 0  
R4006 0  
R4007 0  
R4008 0  
R4009 0 LITERAL  
          pdt\_size = 03:

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

K 9  
15-Sep-1984 23:07:40  
15-Sep-1984 22:53:57

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S255\$DUA28:[RUNOFF.SRC]PDT.REQ;1

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(1)

R4010 0  
R4011 0  
MR4012 0  
MR4013 0  
R4014 0  
R4015 0  
R4016 0

MACRO  
pdt\_definition =  
VECTOR [pdt\_size]  
%;

End of PDT.REQ

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

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15-Sep-1984 23:07:40  
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742  
S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 150  
(2)

: 4017 0 REQUIRE 'REQ:PHDEF.REQ'; ! PHAN\_... macros & literal

R4018 0 PHDEF.REQ Definitions having to do with the page handler  
R4019 0  
R4020 0  
R4021 0  
R4022 0  
R4023 0  
R4024 0  
R4025 0  
R4026 0  
R4027 0  
R4028 0  
R4029 0  
R4030 0  
R4031 0  
R4032 0  
R4033 0  
R4034 0  
R4035 0  
R4036 0  
R4037 0  
R4038 0  
R4039 0  
R4040 0  
R4041 0  
R4042 0  
R4043 0  
R4044 0  
R4045 0  
R4046 0  
R4047 0  
R4048 0  
R4049 0  
R4050 0  
R4051 0  
R4052 0  
R4053 0  
R4054 0  
R4055 0  
R4056 0  
R4057 0  
R4058 0  
R4059 0  
R4060 0  
R4061 0  
R4062 0  
R4063 0  
R4064 0  
R4065 0  
R4066 0  
R4067 0  
R4068 0  
R4069 0  
R4070 0  
R4071 0  
R4072 0  
R4073 0  
R4074 0

Version: 'V04-000'

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++  
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:

This require file defines the structure used to control page formatting.  
The basic structure name is PHAN. A macro herein (PHAN\_DEFINITION) is used  
when defining the structure as an external. Then, the other macros defined  
by this require file are used to access the PHAN structure.

This require file also defines any literals related to page formatting.

\*\*\*\*\* NOTE \*\*\*\*\*  
The items PHAN\_LCHAR and PHAN\_RCHAR are not yet supported by any routines.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 16-October-1980

MODIFIED BY:

007 REM00007 Ray Marshall 16-Nov-1983  
For the fields that need .PHAN[##] references, also added macros  
without the preceding dot so SAVRES can load them. These new  
fields have similar names but with "\_f\_" within them.

006 KFA00006 Ken Alden 16-Mar-1983  
Extended SAVE/RESTORE to DSR.

```

R4075 0
R4076 0 | 005 KAD00005 Keith Dawson 07-Mar-1983
R4077 0 | Global edit of all modules. Updated module names, idents,
R4078 0 | copyright dates. Changed require files to BLISS library.
R4079 0 |
R4080 0 |
R4081 0 |
R4082 0 |
R4083 0 | MACRO
R4084 0 | PHAN_TOP_PAGE = PHAN[00]%, !True, if at top of page. *
R4085 0 | PHAN_LINES = .PHAN[01]%, !(SAVE)Logical lines per page.
R4086 0 | PHAN_f_LINES = PHAN[01]%, !(SAVE)Logical lines per page.
R4087 0 |
R4088 0 | PHAN_LINES = PHAN[02]%, !Physical lines per page.
R4089 0 | PHAN_LINES_TP = PHAN[03]%, !Logical lines so far.
R4090 0 | PHAN_FIGURE = PHAN[04]%, !Count of deferred figure lines
R4091 0 | PHAN_RIGHT = PHAN[05]%, !Amount to shift text right on page.
R4092 0 | PHAN_TOP_FIRST = PHAN[06]%, !TRUE if top of first page *
R4093 0 |
R4094 0 | PHAN_HEADER = .PHAN[07]%, !(SAVEALL)TRUE if headers wanted on pages *
R4095 0 | PHAN_f_HEADER = PHAN[07]%, !(SAVEALL)TRUE if headers wanted on pages *
R4096 0 |
R4097 0 | PHAN_FORM_PEND = PHAN[08]%, !NONZERO if a form feed is waiting. *
R4098 0 | PHAN_S_LINES = PHAN[09]%, !Number of spooled lines per page
R4099 0 |
R4100 0 | PHAN_PAGING = .PHAN[10]%, !(SAVEALL)TRUE if .PAGING was said or implied. *
R4101 0 | PHAN_f_PAGING = PHAN[10]%, !(SAVEALL)TRUE if .PAGING was said or implied. *
R4102 0 |
R4103 0 | PHAN_CMD_PAGING = PHAN[11]%, !TRUE if /NOPAGING was not said or implied. *
R4104 0 | PHAN_DOWN = PHAN[12]%, !Move output down this many lines.
R4105 0 | PHAN_SIMULATE = PHAN[13]%, !TRUE if top of page should be done
R4106 0 | with blank lines rather than a FF. *
R4107 0 | PHAN_BOTTOM = PHAN[14]%, !Number of filled lines when at
R4108 0 | bottom of page.
R4109 0 | PHAN_PAUSE = PHAN[15]%, !TRUE if the user said /PAUSE. *
R4110 0 | PHAN_L_CHAR = PHAN[16]%, !Character to the left of the page number.
R4111 0 | PHAN_R_CHAR = PHAN[17]%, !Character to the right of the page number.
R4112 0 | PHAN_DEPTH = PHAN[18]%; !TRUE if a long PAGE SIZE can generate
R4113 0 | !more than one FF. *
R4114 0 |
R4115 0 | MACRO
MR4116 0 | PHAN_DEFINITION =
R4117 0 | VECTOR[19]%;
R4118 0 |
R4119 0 |
R4120 0 | LITERAL PHAN_MIN_PAGE_LENGTH = 13;
R4121 0 | !No output page may be defined in any
| !way to be smaller than this.

```

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

8:10  
15-Sep-1984 23:07:40    VAX-11 Bliss-32 V4.0-742  
15-Sep-1984 22:50:43    \$255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 153  
(2)

: 4122 0 REQUIRE 'REQ:RNOMAC.REQ';      ! RNOS... command line table items

R4123 0  
R4124 0  
R4125 0  
R4126 0  
R4127 0  
R4128 0  
R4129 0  
R4130 0  
R4131 0  
R4132 0  
R4133 0  
R4134 0  
R4135 0  
R4136 0  
R4137 0  
R4138 0  
R4139 0  
R4140 0  
R4141 0  
R4142 0  
R4143 0  
R4144 0  
R4145 0  
R4146 0  
R4147 0  
R4148 0  
R4149 0  
R4150 0  
R4151 0  
R4152 0  
R4153 0  
R4154 0  
R4155 0  
R4156 0  
R4157 0  
R4158 0  
R4159 0  
R4160 0  
R4161 0  
R4162 0  
R4163 0  
R4164 0  
R4165 0  
R4166 0  
R4167 0  
R4168 0  
R4169 0  
R4170 0  
R4171 0  
R4172 0  
R4173 0  
R4174 0  
R4175 0  
R4176 0  
R4177 0  
R4178 0  
R4179 0

Version: 'V04-000'

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++  
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:  
RUNOFF Command Information. Initialized by the command line interface  
and picked up for distribution by DOOPTS.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

012 REM00012 Ray Marshall 5-December-1983  
Added RNOSV\_LN01\_LOAD to indicate that one wishes to load  
fonts before printing this file on an LN01.

011 REM00011 Ray Marshall 13-Sep-1983  
Added bit RNOSV\_LN01\_HEADER to support disabling the font  
control header information from being put into an .LN1 output  
file.

010 KAD00010 Keith Dawson 2-Jun-1983  
Added bits RNOSV\_S\_RIGHT and RNOSV\_S\_DOWN to tell if the  
qualifiers were explicitly given.

009 KAD00009 Keith Dawson 22-Mar-1983  
Renamed LN01 italic/underline and portrait/landscape bits.

```

R4180 0
R4181 0
R4182 0
R4183 0
R4184 0
R4185 0
R4186 0
R4187 0
R4188 0
R4189 0
R4190 0
R4191 0
R4192 0
R4193 0
R4194 0
R4195 0
R4196 0
R4197 0
R4198 0
R4199 0
R4200 0
R4201 0
R4202 0
R4203 0
R4204 0
R4205 0
R4206 0
R4207 0
R4208 0
R4209 0
R4210 0
R4211 0
R4212 0
R4213 0
R4214 0
R4215 0
R4216 0
R4217 0
R4218 0
R4219 0
R4220 0
R4221 0
R4222 0
R4223 0
R4224 0
R4225 0
R4226 0
R4227 0
R4228 0
R4229 0
R4230 0
R4231 0
R4232 0
R4233 0
R4234 0
R4235 0
R4236 0

in order to reflect the default values.  

Got rid of RNOSV FLIP bit, in favor of (.gca_op_dev  

EQL op_dev_flip).

008 KAD00008 Keith Dawson 07-Mar-1983
Global edit of all modules. Updated module names, idents,  

copyright dates. Changed require files to BLISS library.

--  

SFIELD $rnoScmd_fields = SET  

! File specification string descriptors.  

rnost_input      = [$DESCRIPTOR(FIXED)] ;           ! Input  

rnost_output     = [$DESCRIPTOR(FIXED)] ;           ! Output  

rnost_intermediate = [$DESCRIPTOR(FIXED)] ;          ! Binary intermediate .BRN type file  

rnost_drop_rec   = [$DESCRIPTOR(FIXED)] ;           ! Drop-record file  

! Miscellaneous other string descriptors.  

rnost_program_name = [$DESCRIPTOR(FIXED)] ;          ! Name of program  

rnost_program_filename = [$DESCRIPTOR(FIXED)] ;        ! Filename of program  

rnost_pages       = [$DESCRIPTOR(FIXED)] ;           ! Page range string descriptor:  

$OVERLAY( $SUB_FIELD( rnost_pages, STRSH_LENGTH ) )  

rnosh_pages       = [SBYTES(2)] ;                      ! Length of page range string  

$OVERLAY( $SUB_FIELD( rnost_pages, STRSA_POINTER ) )  

rnosa_pages       = [SPINTER] ;                         ! pointer to page range string  

$CONTINUE  

rnost_variant     = [$DESCRIPTOR(FIXED)] ;           ! Variant string descriptor:  

$OVERLAY( $SUB_FIELD( rnost_variant, STRSH_LENGTH ) )  

rnosh_variant     = [SBYTES(2)] ;                      ! length of variant string  

$OVERLAY( $SUB_FIELD( rnost_variant, STRSA_POINTER ) )  

rnosa_variant     = [SPINTER] ;                         ! pointer to variant string  

$CONTINUE  

rnosa_datetime    = [SBYTES(12)].                     ! System date and time  

$OVERLAY( rnosa_datetime )  

rnosh_year        = [SBYTES(2)] ;  

rnosh_month       = [SBYTES(2)] ;  

rnosh_monthday    = [SBYTES(2)] ;  

rnosh_hours       = [SBYTES(2)] ;  

rnosh_minutes     = [SBYTES(2)] ;  

rnosh_seconds     = [SBYTES(2)] ;  

$CONTINUE  

! Three words of switch option bits:  

rnosv_options     = [SBYTES(8)] ;                      ! Command option indicators:  

$OVERLAY( rnosv_options )  

rnosv_option1     = [SBYTES(2)] ;  

rnosv_option2     = [SBYTES(2)] ;  

rnosv_option3     = [SBYTES(2)] ;  

rnosv_option4     = [SBYTES(2)] ;

```

```

R4237 0
R4238 0
R4239 0
R4240 0
R4241 0
R4242 0
R4243 0
R4244 0
R4245 0
R4246 0
R4247 0
R4248 0
R4249 0
R4250 0
R4251 0
R4252 0
R4253 0
R4254 0
R4255 0
R4256 0
R4257 0
R4258 0
R4259 0
R4260 0
R4261 0
R4262 0
R4263 0
R4264 0
R4265 0
R4266 0
R4267 0
R4268 0
R4269 0
R4270 0
R4271 0
R4272 0
R4273 0
R4274 0
R4275 0
R4276 0
R4277 0
R4278 0
R4279 0
R4280 0
R4281 0
R4282 0
R4283 0
R4284 0
R4285 0
R4286 0
R4287 0
R4288 0
R4289 0
R4290 0
R4291 0
R4292 0
R4293 0

    SOVERLAY ( rno$v_option1 )

    rno$v_2Automatic = [$BITS(2)]
        $OVERLAY ( rno$v_2Automatic )
    rno$v_Automatic = [$BIT]
    rno$v_s_Automatic = [$BIT];
    ! carries state of /AUTOMATIC to DOOPTS
    ! execute multiple passes and utilities as needed
    ! /AUTOMATIC explicitly specified

    rno$v_2backspace = [$BITS(2)]
        $OVERLAY ( rno$v_2backspace )
    rno$v_backspace = [$BIT]
    rno$v_s_backspace = [$BIT];
    ! backspace on same line
    ! backspace on same line
    ! /BACKSPACE explicitly specified

    rno$v_2change = [$BITS(2)]
        $OVERLAY ( rno$v_2change )
    rno$v_change = [$BIT]
    rno$v_s_change = [$BIT];
    ! change bars requested
    ! change bars allowed
    ! /CHANGE explicitly specified

    rno$v_chng_char = [$BIT];
    ! change bar character specified (see below)

    rno$v_2cross_reference = [$BITS(2)]
        $OVERLAY ( rno$v_2cross_reference )
    rno$v_cross_reference = [$BIT]
    rno$v_s_cross_reference = [$BIT];
    ! carries state of /CROSSREFERENCE to DOOPTS
    ! translate cross references
    ! /CROSS_REFERENCE explicitly specified

    rno$v_deb_cond = [$BIT]
    rno$v_deb_cont = [$BIT]
    rno$v_deb_cros = [$BIT]
    rno$v_deb_files = [$BIT]
    rno$v_deb_index = [$BIT]
    rno$v_deb_save = [$BIT];
    ! go through all paths of .IFs and output draft flags
    ! echo toc entries in output file
    ! echo .REFs & $FOOs in output file
    ! put file names in the output.
    ! echo index entries in output file
    ! echo .SAVEs & .RESs in output file

    ! (1 free bit in OPTION1)

    SOVERLAY ( rno$v_option2 )

    rno$v_2intermediate = [$BITS(2)]
        $OVERLAY ( rno$v_2intermediate )
    rno$v_intermediate = [$BIT]
    rno$v_s_intermediate = [$BIT];
    ! carries state of /INTERMEDIATE to DOOPTS
    ! a .BRN type file will be generated
    ! /INTERMEDIATE explicitly specified

    rno$v_2log = [$BITS(2)]
        $OVERLAY ( rno$v_2log )
    rno$v_log = [$BIT]
    rno$v_s_log = [$BIT];
    ! print final statistics
    ! print final statistics
    ! /LOG explicitly specified

    rno$v_msg_out = [$BIT]
    rno$v_msg_user = [$BIT];
    ! put DSR messages in the output file
    ! send DSR messages to the user

    rno$v_4_out_format = [$BITS(4)];
    ! defines output formats

    rno$v_2output = [$BITS(2)]
        $OVERLAY ( rno$v_2output )
    rno$v_output = [$BIT]
    rno$v_s_output = [$BIT];
    ! output file requested
    ! output file requested
    ! /OUTPUT explicitly specified

    rno$v_2overprint = [$BITS(2)]
        $OVERLAY ( rno$v_2overprint )
    ! overprint on same line

```

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

```

R4294 0   rno$v_overprint    = [SBIT] .
R4295 0   rno$v_s_overprint  = [SBIT] .
R4296 0
R4297 0   rno$v_2_pause      = [SBITS(2)] ,
R4298 0   $OVERLAY ( rno$v_2_pause )
R4299 0   rno$v_pause        = [SBIT] .
R4300 0   rno$v_s_pause      = [SBIT] .

; (NO free bits in OPTION2)

R4304 0   $OVERLAY ( rno$v_option3 )
R4305 0
R4306 0   rno$v_quick       = [SBIT] .
R4307 0
R4308 0   rno$v_2_sequence   = [SBITS(2)] ,
R4309 0   $OVERLAY ( rno$v_2_sequence )
R4310 0   rno$v_sequence     = [SBIT] .
R4311 0   rno$v_s_sequence   = [SBIT] .

R4313 0   rno$v_2_simulate   = [SBITS(2)] ,
R4314 0   $OVERLAY ( rno$v_2_simulate )
R4315 0   rno$v_simulate     = [SBIT] .
R4316 0   rno$v_s_simulate   = [SBIT] .

R4318 0   rno$v_2_underline   = [SBITS(2)] ,
R4319 0   $OVERLAY ( rno$v_2_underline )
R4320 0   rno$v_underline     = [SBIT] .
R4321 0   rno$v_s_underline   = [SBIT] .

R4323 0   rno$v_2_und_separ   = [SBITS(2)] ,
R4324 0   $OVERLAY ( rno$v_2_und_separ )
R4325 0   rno$v_und_separ    = [SBIT] .
R4326 0   rno$v_s_und_separ   = [SBIT] .

R4328 0   rno$v_2_und_nonsp   = [SBITS(2)] ,
R4329 0   $OVERLAY ( rno$v_2_und_nonsp )
R4330 0   rno$v_und_nonsp    = [SBIT] .
R4331 0   rno$v_s_und_nonsp   = [SBIT] .

R4333 0   rno$v_und_char     = [SBIT] .

; (4 free bits in OPTION3)

R4358 0   $OVERLAY ( rno$v_option4 )
R4359 0
R4360 0   rno$v_ln01_ital_under = [SBIT] ,
R4361 0   rno$v_ln01_port_landscape = [SBIT] ,
R4362 0   rno$v_ln01_header     = [SBIT] ,
R4363 0   rno$v_ln01_load      = [SBIT] .

R4365 0   rno$v_s_down        = [SBIT] .
R4366 0   rno$v_s_right       = [SBIT] .

; (11 free bits in OPTION4)

R4350 0   $CONTINUE

```

F 10  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 V4.0-742  
15-Sep-1984 22:54:12 \$255SDUA28:[RUNOFF.SRC]RNOMAC.REQ;1

Page 157  
(1)

; overprint on same line  
/OVERPRINT explicitly specified  
; pause at page boundary requested  
/PAUSE explicitly specified  
; (do quick processing (for contents, index))  
; output sequence numbers requested  
; output sequence numbers requested  
/SEQUENCE explicitly specified  
; simulate printer form feeds  
; simulate printer form feeds  
/SIMULATE explicitly specified  
; underlining requested  
; underlining requested: (default)  
/UNDERLINE explicitly specified  
; underlining on separate line  
; underlining on separate line  
/SEPARATE\_UNDERLINE explicitly specified  
; underlining non-spacing inline  
; non-spacing inline  
/NONSPACING explicitly specified  
; character specified (see below)

! Options for LN01 output:  
set = italics, clear = underlining  
set = portrait, clear = landscape  
set = if header wanted in O/P file  
set = loading of fonts is desired

/DOWN explicitly specified  
/RIGHT explicitly specified

```
: R4351 0
: R4352 0 rnoSc_change = [SBYTE];
: R4353 0 rnoSc_underline = [SBYTE]; ! Change bar character (RNOSV_CHNG_CHAR set)
: R4354 0
: R4355 0 rnoSh_bold = [SSHORT_INTEGER]; ! Underline character (RNOSV_DND_CHAR set)
: R4356 0 rnoSh_dbg1 = [SSHORT_INTEGER];
: R4357 0 rnoSh_dbg2 = [SSHORT_INTEGER];
: R4358 0 rnoSh_down = [SSHORT_INTEGER];
: R4359 0 rnoSh_right = [SSHORT_INTEGER];
: R4360 0 rnoSh_form_size = [SSHORT_INTEGER]; ! Bolding overprint count
: R4361 0
: R4362 0
: R4363 0
: R4364 0 TES: LITERAL rnoSk_cmd_len = $FIELD_SET_SIZE; ! Length of RUNOFF command block
: R4365 0
: R4366 0
: MR4367 0 MACRO
: MR4368 0   Srno_cmd =
: R4369 0     BLOCK [rnoSk_cmd_len] FIELD (SrnoScmd_fields)
: R4370 0   X;
: R4371 0 ! End of RNOMAC.REQ
```

FLIPRECS -- FLIP/RUNOFF record formats  
TOCML -- HL indicator record

H 10  
15-Sep-1984 23:07:40  
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742  
S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 159  
(2)

: 4372 0 REQUIRE 'REQ:RUNHAN.REQ'; ! H.... directive literals

R4373 0 ! RUNHAN.REQ - Literal values of each directive.

R4374 0 Version: 'V04-000'

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\*\*\*\*\*  
++ FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:

This require file defines the literals used to reference the  
various DSR commands.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday CREATION DATE: 1978

R4413 0  
R4414 0  
R4415 0  
R4416 0  
R4417 0  
R4418 0  
R4419 0  
R4420 0  
R4421 0  
R4422 0  
R4423 0  
R4424 0  
R4425 0  
R4426 0  
R4427 0  
R4428 0  
R4429 0  
R4430 0  
R4431 0  
R4432 0  
R4433 0  
R4434 0  
R4435 0

MODIFIED BY:

- 014 KFA00014 Ken Alden 04-Aug-1983  
Added H\_DISABLE\_APPEN, H\_PAGE\_NOW.
- 013 KFA00013 Ken Alden 03-Aug-1983  
Added directive H\_ENABLE CHAPTER, H\_DISABLE CHAPTER (dsrplus).
- 012 RER00012 Ron Randall 17-Mar-1983  
Made topnote-related text consistent with other modules.
- 011 KFA00011 Ken Alden 16-Mar-1983  
Made SAVE/RESTORE visible to DSR.
- 010 KAD00010 Keith Dawson 07-Mar-1983  
Global edit of all modules. Updated module names, idents,  
copyright dates. Changed require files to BLISS library.  
Made handler codes numerically ascending again through  
their alphabetical order, including both DSR-only and  
DSRPLUS commands. The DSRPLUS commands will still be  
reported as errors for DSR.
-

R4436 0 LITERAL H\_APPENDIX = 1:  
R4437 0 LITERAL H\_AUTOJUSTIFY = 2:  
R4438 0 LITERAL H\_AUTOPARAGRAPH = 3:  
R4439 0 LITERAL H\_AUTOSUBTITLE = 4:  
R4440 0 LITERAL H\_AUTOTABLE = 5:  
R4441 0  
UR4442 0 XIF DSRPLUS %THEN  
UR4443 0 LITERAL H\_AUTOTITLE = 6:  
R4444 0 XFI  
R4445 0  
R4446 0 LITERAL H\_BEGIN\_BAR = 7:  
R4447 0  
UR4448 0 XIF DSRPLUS %THEN  
UR4449 0 LITERAL H\_BEGIN\_TOPNOTE = 8:  
UR4450 0 LITERAL H\_BEGIN\_PASSTHR = 9:  
R4451 0 XFI  
R4452 0  
R4453 0 LITERAL H\_BLANK = 10:  
R4454 0 LITERAL H\_BREAK = 11:  
R4455 0 LITERAL H\_CENTER = 12:  
R4456 0 LITERAL H\_CHAPTER = 13:  
R4457 0 LITERAL H\_COMMENT = 14:  
R4458 0 LITERAL H\_CONTROL\_CHARA = 15:  
R4459 0  
UR4460 0 XIF DSRPLUS %THEN  
UR4461 0 LITERAL H\_REFERENCEPOIN = 16:  
R4462 0 XFI  
R4463 0  
R4464 0 LITERAL H\_DATE = 17:  
R4465 0  
UR4466 0 XIF DSRPLUS %THEN  
UR4467 0 LITERAL H\_DISABLE\_APPEN = 214:  
R4468 0 XFI  
R4469 0  
R4470 0 LITERAL H\_DISABLE\_BAR = 18:  
R4471 0 LITERAL H\_DISABLE\_BOLD = 19:  
R4472 0  
UR4473 0 XIF DSRPLUS %THEN  
UR4474 0 LITERAL H\_DISABLE\_CHAPT = 212;! Same as H\_no\_chapter  
R4475 0 XFI  
R4476 0  
R4477 0 LITERAL H\_DISABLE\_HYPHE = 20:  
R4478 0 LITERAL H\_DISABLE\_INDEX = 21:  
R4479 0 LITERAL H\_DISABLE\_OVERS = 22:  
R4480 0 LITERAL H\_DISABLE\_TOC = 23:  
R4481 0 LITERAL H\_DISABLE\_UNDER = 24:  
R4482 0  
UR4483 0 XIF DSRPLUS %THEN  
UR4484 0 LITERAL H\_DISABLE\_XPLUS = 25:  
R4485 0 XFI  
R4486 0  
R4487 0 LITERAL H\_DISPLAY\_APPEN = 26:  
R4488 0 LITERAL H\_DISPLAY\_CHAPT = 27:  
R4489 0  
UR4490 0 XIF DSRPLUS %THEN  
UR4491 0 LITERAL H\_DISPLAY\_COUNT = 28:  
R4492 0 XFI

R4493 0  
R4494 0 LITERAL H\_DISPLAY\_DAY = 29:  
R4495 0 LITERAL H\_DISPLAY\_ELEME = 30:  
R4496 0  
UR4497 0 XIF DSRPLUS %THEN  
UR4498 0 LITERAL H\_DISPLAY\_EXAMP = 31:  
UR4499 0 LITERAL H\_DISPLAY FIGUR = 32:  
UR4500 0 LITERAL H\_DISPLAY\_HEAD = 33:  
R4501 0 XFI  
R4502 0  
R4503 0 LITERAL H\_DISPLAY\_HOURS = 34:  
R4504 0 LITERAL H\_DISPLAY\_LEVEL = 35:  
R4505 0 LITERAL H\_DISPLAY\_MINUT = 36:  
R4506 0 LITERAL H\_DISPLAY\_MONTH = 37:  
R4507 0 LITERAL H\_DISPLAY\_NUMBE = 38:  
R4508 0 LITERAL H\_DISPLAY\_SECON = 39:  
R4509 0 LITERAL H\_DISPLAY\_SUBPA = 40:  
R4510 0  
UR4511 0 XIF DSRPLUS %THEN  
UR4512 0 LITERAL H\_DISPLAY\_TABLE = 41:  
R4513 0 XFI  
R4514 0  
R4515 0 LITERAL H\_DISPLAY\_YEAR = 42:  
R4516 0 LITERAL H\_DO\_INDEX = 43:  
R4517 0  
UR4518 0 XIF DSRPLUS %THEN  
UR4519 0 LITERAL H\_DO\_CONTENTS = 44:  
UR4520 0 LITERAL H\_DO\_TABLE = 45:  
R4521 0 XFI  
R4522 0  
R4523 0 LITERAL H\_ELSE = 46:  
R4524 0  
UR4525 0 XIF DSRPLUS %THEN  
UR4526 0 LITERAL H\_ENABLE\_APPEND = 213:  
R4527 0 XFI  
R4528 0  
R4529 0 LITERAL H\_ENABLE\_BAR = 47:  
R4530 0 LITERAL H\_ENABLE\_BOLDIN = 48:  
R4531 0  
UR4532 0 XIF DSRPLUS %THEN  
UR4533 0 LITERAL H\_ENABLE\_CHAPTE = 211:  
R4534 0 XFI  
R4535 0  
R4536 0 LITERAL H\_ENABLE\_HYPHEN = 49:  
R4537 0 LITERAL H\_ENABLE\_INDEXI = 50:  
R4538 0 LITERAL H\_ENABLE\_OVERST = 51:  
R4539 0  
UR4540 0 XIF DSRPLUS %THEN  
UR4541 0 LITERAL H\_ENABLE\_XPLUS = 52:  
R4542 0 XFI  
R4543 0  
R4544 0 LITERAL H\_ENABLE\_TOC = 53:  
R4545 0 LITERAL H\_ENABLE\_UNDERL = 54:  
R4546 0 LITERAL H\_ENDIF = 55:  
R4547 0 LITERAL H\_END\_BAR = 56:  
R4548 0 LITERAL H\_END\_FOOTNOTE = 57:  
R4549 0

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

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UR4550 0 %IF DSRPLUS %THEN  
UR4551 0 LITERAL H\_END\_TOPNOTE = 58;  
R4552 0 %FI  
R4553 0  
R4554 0 LITERAL H\_END\_LIST = 59;  
R4555 0 LITERAL H\_END\_LITERAL = 60;  
R4556 0 LITERAL H\_END\_NOTE = 61;  
R4557 0  
UR4558 0 %IF DSRPLUS %THEN  
UR4559 0 LITERAL H\_END\_PASSTHROU = 62;  
R4560 0 %FI  
R4561 0  
R4562 0 LITERAL H\_END\_SUBPAGE = 63;  
R4563 0 LITERAL H\_ENTRY = 64;  
R4564 0 LITERAL H\_PICTURE = 65;  
R4565 0 LITERAL H\_PICTURE\_DEFERR = 66;  
R4566 0 LITERAL H\_FILL = 67;  
R4567 0 LITERAL H\_FIRST\_TITLE = 68;  
R4568 0  
UR4569 0 %IF DSRPLUS %THEN  
UR4570 0 LITERAL H\_FIRST\_TITLE\_A = 69;  
R4571 0 %FI  
R4572 0  
R4573 0 LITERAL H\_FLAGS\_ALL = 70;  
R4574 0 LITERAL H\_FLAGS\_BOLD = 71;  
R4575 0 LITERAL H\_FLAGS\_BREAK = 72;  
R4576 0 LITERAL H\_FLAGS\_CAPITAL = 73;  
R4577 0 LITERAL H\_FLAGS\_COMMENT = 74;  
R4578 0 LITERAL H\_FLAGS\_CONTROL = 75;  
R4579 0 LITERAL H\_FLAGS\_ENDFOOT = 76;  
R4580 0 LITERAL H\_FLAGS\_HYPHEHA = 77;  
R4581 0 LITERAL H\_FLAGS\_INDEX = 78;  
R4582 0 LITERAL H\_FLAGS\_LOWERCA = 79;  
R4583 0 LITERAL H\_FLAGS\_OVERSTR = 80;  
R4584 0  
UR4585 0 %IF DSRPLUS %THEN  
UR4586 0 LITERAL H\_FLAGS\_NOPERMU = 81;  
UR4587 0 LITERAL H\_FLAGS\_PASSTHR = 82;  
R4588 0 %FI  
R4589 0  
R4590 0 LITERAL H\_FLAGS\_PERIOD = 83;  
R4591 0 LITERAL H\_FLAGS\_QUOTE = 84;  
R4592 0 LITERAL H\_FLAGS\_SPACE = 85;  
R4593 0 LITERAL H\_FLAGS\_SUBINDE = 86;  
R4594 0 LITERAL H\_FLAGS\_SUBSTIT = 87;  
R4595 0 LITERAL H\_FLAGS\_UNDERLI = 88;  
R4596 0 LITERAL H\_FLAGS\_UPPERCA = 89;  
R4597 0 LITERAL H\_FOOTNOTE = 90;  
R4598 0 LITERAL H\_HEADERS\_LOWER = 91;  
R4599 0 LITERAL H\_HEADERS\_MIXED = 92;  
R4600 0 LITERAL H\_HEADERS\_ON = 93;  
R4601 0 LITERAL H\_HEADERS\_UPPER = 94;  
R4602 0  
UR4603 0 %IF DSRPLUS %THEN  
UR4604 0 LITERAL H\_HEADER\_EXAMPL = 95;  
UR4605 0 LITERAL H\_HEADER\_PICTURE = 96;  
R4606 0 %FI

```

R4607 0
R4608 0 LITERAL H_HEADER_LEVEL = 97;
R4609 0
UR4610 0 %IF DSRPLUS %THEN
UR4611 0 LITERAL H_HEADER_TABLE = 98;
UR4612 0 LITERAL H_TOPNOTE_ON = 99;
R4613 0 %FI
R4614 0
R4615 0 LITERAL H_HYPHENATION = 100;
R4616 0 LITERAL H_IF = 101;
R4617 0 LITERAL H_IFNOT = 102;
R4618 0 LITERAL H_INDENT = 103;
R4619 0 LITERAL H_INDEX = 104;
R4620 0 LITERAL H_JUSTIFY = 105;
R4621 0 LITERAL H_KEEP = 106;
R4622 0 LITERAL H_LAYOUT = 107;
R4623 0 LITERAL H_LEFT = 108;
R4624 0 LITERAL H_LEFT_MARGIN = 109;
R4625 0 LITERAL H_LIST = 110;
R4626 0 LITERAL H_LIST_ELEMENT = 111;
R4627 0 LITERAL H_LITERAL = 112;
R4628 0 LITERAL H_LOWER_CASE = 113;
R4629 0 LITERAL H_NOTE = 114;
R4630 0 LITERAL H_NO_AUTOJUSTIF = 115;
R4631 0 LITERAL H_NO_AUTOPARAGR = 116;
R4632 0 LITERAL H_NO_AUTOSUBIT = 117;
R4633 0 LITERAL H_NO_AUTOTABLE = 118;
R4634 0
UR4635 0 %IF DSRPLUS %THEN
UR4636 0 LITERAL H_NO_AUTOTITLE = 119;
UR4637 0 LITERAL H_NO_CHAPTER = 120;
R4638 0 %FI
R4639 0
R4640 0 LITERAL H_NO_CONTROL_CH = 121;
R4641 0 LITERAL H_NO_DATE = 122;
R4642 0 LITERAL H_NO_FILL = 123;
R4643 0 LITERAL H_NO_FLAGS_ALL = 124;
R4644 0 LITERAL H_NO_FLAGS_BOLD = 125;
R4645 0 LITERAL H_NO_FLAGS_BREA = 126;
R4646 0 LITERAL H_NO_FLAGS_CAPI = 127;
R4647 0 LITERAL H_NO_FLAGS_COMM = 128;
R4648 0 LITERAL H_NO_FLAGS_CONT = 129;
R4649 0 LITERAL H_NO_FLAGS_ENDF = 130;
R4650 0 LITERAL H_NO_FLAGS_HYPH = 131;
R4651 0 LITERAL H_NO_FLAGS_INDE = 132;
R4652 0 LITERAL H_NO_FLAGS_LOW = 133;
R4653 0 LITERAL H_NO_FLAGS_OVER = 134;
R4654 0
UR4655 0 %IF DSRPLUS %THEN
UR4656 0 LITERAL H_NO_FLAGS_NOPE = 135;
UR4657 0 LITERAL H_NO_FLAGS_PASS = 136;
R4658 0 %FI
R4659 0
R4660 0 LITERAL H_NO_FLAGS_PERI = 137;
R4661 0 LITERAL H_NO_FLAGS_QUOT = 138;
R4662 0 LITERAL H_NO_FLAGS_SPAC = 139;
R4663 0 LITERAL H_NO_FLAGS_SUBI = 140;

```

R4664	0	LITERAL H_NO_FLAGS_SUBS =	141:
R4665	0	LITERAL H_NO_FLAGS_UNDE =	142:
R4666	0	LITERAL H_NO_FLAGS_UPPE =	143:
R4667	0	LITERAL H_NO_HEADERS =	144:
R4668	0	LITERAL H_NO_TOPNOTE =	145:
R4669	0	LITERAL H_NO_HYPHENATIO =	146:
R4670	0	LITERAL H_NO_KEEP =	147:
R4671	0	LITERAL H_NO_JUSTIFY =	148:
R4672	0	LITERAL H_NO_NUMBER =	149:
R4673	0	XIF DSRPLUS %THEN	
UR4674	0	LITERAL H_NO_NUMBER_FOO =	150:
R4675	0	XFI	
R4677	0		
R4678	0	LITERAL H_NO_PAGING =	151:
R4679	0	LITERAL H_NO_PERIOD =	152:
R4680	0	LITERAL H_NO_SPACE =	153:
R4681	0	LITERAL H_NO_SUBTITLE =	154:
R4682	0	LITERAL H_NUMBER_APPEND =	155:
R4683	0	LITERAL H_NUMBER_CHAPTE =	156:
R4684	0	XIF DSRPLUS %THEN	
UR4685	0	LITERAL H_NUMBER_EXAMPL =	157:
UR4686	0	LITERAL H_NUMBER FIGURE =	158:
UR4687	0	LITERAL H_NUMBER_FOOTNO =	159:
R4689	0	XFI	
R4690	0		
R4691	0	LITERAL H_NUMBER_INDEX =	160:
R4692	0	LITERAL H_NUMBER_LEVEL =	161:
R4693	0	LITERAL H_NUMBER_LIST =	162:
R4694	0	LITERAL H_NUMBER_PAGE =	163:
R4695	0	LITERAL H_NUMBER_RUNNIN =	164:
R4696	0	LITERAL H_NUMBER_SUBPAG =	165:
R4697	0	XIF DSRPLUS %THEN	
UR4698	0	LITERAL H_NUMBER_TABLE =	166:
R4700	0	XFI	
R4701	0		
R4702	0	LITERAL H_PAGE =	167:
R4703	0	XIF DSRPLUS %THEN	
UR4704	0	LITERAL H_PAGE_NOW =	215:
R4706	0	XFI	
R4707	0		
R4708	0	LITERAL H_PAGE_SIZE =	168:
R4709	0	LITERAL H_PAGING =	169:
R4710	0	LITERAL H_PARAGRAPH =	170:
R4711	0	LITERAL H_PERIOD =	171:
R4712	0	LITERAL H_PRINT_INDEX =	172:
R4713	0	LITERAL H_REPEAT =	173:
R4714	0	LITERAL H_REQUIRE =	174:
R4715	0	LITERAL H_RESTORE =	175:
R4716	0	LITERAL H_RIGHT =	176:
R4717	0	LITERAL H_RIGHT_MARGIN =	177:
R4718	0	LITERAL H_SAVE =	178:
R4719	0	LITERAL H_SAVE_ALL =	179:
R4720	0		

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

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: UR4721 0 %IF DSRPLUS %THEN  
UR4722 0 LITERAL H\_SEND\_CONTENTS = 180:  
R4723 0 %FI  
R4724 0  
R4725 0 LITERAL H\_SEND\_TOC = 181:  
R4726 0  
UR4727 0 %IF DSRPLUS %THEN  
UR4728 0 LITERAL H\_SET\_COUNTER = 182:  
R4729 0 %FI  
R4730 0  
R4731 0 LITERAL H\_SET\_DATE = 183:  
R4732 0 LITERAL H\_SET\_LEVEL = 184:  
R4733 0 LITERAL H\_SET\_PARAGRAPH = 185:  
R4734 0  
UR4735 0 %IF DSRPLUS %THEN  
UR4736 0 LITERAL H\_SET\_TEXTSTRIN = 186:  
R4737 0 %FI  
R4738 0  
R4739 0 LITERAL H\_SET\_TIME = 187:  
R4740 0 LITERAL H\_SKIP = 188:  
R4741 0 LITERAL H\_SPACING = 189:  
R4742 0 LITERAL H\_STANDARD = 190:  
R4743 0  
UR4744 0 %IF DSRPLUS %THEN  
UR4745 0 LITERAL H\_STYLE\_APPENDI = 191:  
UR4746 0 LITERAL H\_STYLE\_CHAPTER = 192:  
R4747 0 %FI  
R4748 0  
R4749 0 LITERAL H\_STYLE\_DATE = 193:  
R4750 0  
UR4751 0 %IF DSRPLUS %THEN  
UR4752 0 LITERAL H\_STYLE\_EXAMPLE = 194:  
UR4753 0 LITERAL H\_STYLE\_PICTURE = 195:  
R4754 0 %FI  
R4755 0  
R4756 0 LITERAL H\_STYLE\_HEADERS = 196:  
R4757 0  
UR4758 0 %IF DSRPLUS %THEN  
UR4759 0 LITERAL H\_STYLE\_TABLE = 197:  
R4760 0 %FI  
R4761 0  
R4762 0 LITERAL H\_STYLE\_TIME = 198:  
R4763 0 LITERAL H\_SUBINDEX = 199:  
R4764 0 LITERAL H\_SUBPAGE = 200:  
R4765 0 LITERAL H\_SUBTITLE = 201:  
R4766 0 LITERAL H\_TAB\_STOPS = 202:  
R4767 0 LITERAL H\_TEST\_PAGE = 203:  
R4768 0 LITERAL H\_TITLE = 204:  
R4769 0 LITERAL H\_UPPER\_CASE = 205:  
R4770 0 LITERAL H\_VARIABLE = 206:  
R4771 0 LITERAL H\_XLOWER = 207:  
R4772 0  
UR4773 0 %IF DSRPLUS %THEN  
UR4774 0 LITERAL H\_XPLUS = 208:  
R4775 0 %FI  
R4776 0  
R4777 0 LITERAL H\_XUPPER = 209:

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

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R4778 0  
UR4779 0 %IF DSRPLUS %THEN  
UR4780 0 LITERAL H\_YPLUS = 210;  
R4781 0 %FI  
R4782 0  
R4783 0 LITERAL FIRST\_COMMAND = 1;  
R4784 0 LITERAL LAST\_COMMAND = 215;  
R4785 0  
R4786 0 ! End of RUNHAN.REQ

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

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: 4787 0 REQUIRE 'REQ:SAVE.REQ'; ! Save and Restore definitions

R4788 0  
R4789 0  
R4790 0  
R4791 0  
R4792 0  
R4793 0  
R4794 0  
R4795 0  
R4796 0  
R4797 0  
R4798 0  
R4799 0  
R4800 0  
R4801 0  
R4802 0  
R4803 0  
R4804 0  
R4805 0  
R4806 0  
R4807 0  
R4808 0  
R4809 0  
R4810 0  
R4811 0  
R4812 0  
R4813 0  
R4814 0  
R4815 0  
R4816 0  
R4817 0  
R4818 0  
R4819 0  
R4820 0  
R4821 0  
R4822 0  
R4823 0  
R4824 0  
R4825 0  
R4826 0  
R4827 0  
R4828 0  
R4829 0  
R4830 0  
R4831 0  
R4832 0  
R4833 0  
R4834 0  
R4835 0  
R4836 0  
R4837 0  
R4838 0  
R4839 0  
R4840 0  
R4841 0  
R4842 0  
R4843 0  
R4844 0

Version: 'V04-000'

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FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:

This require file defines part of the storage area for the .SAVE  
commands. Whole structures that will be saved will remain as they  
are; this Require file just defines the additional area for the  
single items. Items declared in the SAVE area do not also appear in  
the SAVEALL area because the SAVEALL area includes all that is in  
the SAVE area.

ENVIRONMENT: Transportable BLISS

AUTHOR: Ken Alden

CREATION DATE: December 1982

MODIFIED BY:

007 REM00007 Ray Marshall 1-June-1984  
Completely reworked the definitions of SAVE\_LENGTH &  
SAVEALL\_LENGTH. At least one size was wrong and hard coded  
values were used where a XSIZE could have been used. Now  
XSIZE is used for most of the items. Also, the XPD\_ items  
are now conditionalized for DSRPLUS.

006 KFA00006 Ken Alden 30-Sep-1983  
Moved the HCT items to the .SAVE list and three SCA items to  
the .SAVE ALL item block.

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

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15-Sep-1984 23:07:40  
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R4845 0	005	KFA00005	Ken Alden	27-Jul-1983
R4846 0		Added gca_flag_cmd to the save list.		
R4847 0	004	KFA00004	Ken Alden	5-Jul-1983
R4848 0		Added SCA_FLAGS to the save list.		
R4849 0	003	KAD00003	Keith Dawson	07-Mar-1983
R4850 0		Global edit of all modules. Updated module names, idents,		
R4851 0		copyright dates. Changed require files to BLISS library.		
R4852 0				
R4853 0				
R4854 0				
R4855 0	--			

```

R4856 0 SFIELD SAVE_FIELDS =
R4857 0     SET
R4858 0     saveSg_sca_cc_ok      = [SINTEGER];
R4859 0     saveSg_sca_justify    = [SINTEGER];
R4860 0     saveSg_sca_fill      = [SINTEGER];
R4861 0     saveSg_sca_crock     = [SINTEGER];
R4862 0     saveSg_sca_lm       = [SINTEGER];
R4863 0     saveSg_sca_rm       = [SINTEGER];
R4864 0     saveSg_sca_spacing   = [SINTEGER];
R4865 0     saveSg_sca_ker      = [SINTEGER];
R4866 0     saveSg_sca_autotitle = [SINTEGER];
R4867 0     saveSg_sca_flags     = [SINTEGER];
R4868 0     saveSg_gca_width     = [SINTEGER];
R4869 0     saveSg_gca_flag_cmd  = [SINTEGER];
R4870 0     saveSg_gca_keep      = [SINTEGER];
R4871 0     saveSg_hct_hd_case   = [SINTEGER];
R4872 0     saveSg_hct_date     = [SINTEGER];
R4873 0     saveSg_hct_headers  = [SINTEGER];
R4874 0     saveSg_hct_nmpg_np   = [SINTEGER];
R4875 0     saveSg_hct_number_pag = [SINTEGER];
R4876 0     saveSg_hct_subtitle = [SINTEGER];
R4877 0     saveSg_phan_llines   = [SINTEGER];
R4878 0     TES;

R4879 0 LITERAL
R4880 0     saveSk_length = SFIELD_SET_SIZE;
R4881 0
R4882 0
R4883 0
MR4884 0 MACRO
R4885 0     $save_block =
R4886 0     BLOCK [saveSk_length] FIELD (save_fields) %;
R4887 0
R4888 0 SFIELD saveall_fields =
R4889 0     SET
R4890 0     saveallSg_gca_autojust = [SINTEGER];
R4891 0     saveallSg_gca_autopara = [SINTEGER];
R4892 0     saveallSg_gca_autosubt = [SINTEGER];
R4893 0     saveallSg_gca_autotabl = [SINTEGER];
R4894 0     saveallSg_gca_case    = [SINTEGER];
R4895 0     saveallSg_gca_xcase   = [SINTEGER];
R4896 0     saveallSg_phan_header = [SINTEGER];
R4897 0     saveallSg_phan_paging = [SINTEGER];
R4898 0     saveallSg_sca_cc_ok   = [SINTEGER];
R4899 0     saveallSg_sca_bar_char = [SINTEGER];
R4900 0     saveallSg_sca_period  = [SINTEGER];
R4901 0     TES;

R4902 0 LITERAL
R4903 0     saveallSk_length = SFIELD_SET_SIZE;
R4904 0
R4905 0
MR4906 0 MACRO
R4907 0     $saveall_block =
R4908 0     BLOCK [saveallSk_length] FIELD (saveall_fields) %;
R4909 0
MR4910 0 MACRO
R4911 0     SXWDS (defined_as) =
R4912 0     %SIZE(defined_as)/%UPVAL %;

```

```
R4913 0 LITERAL      ! Counting ZBPVALS (or fullwords) since the size of this literal
R4914 0
R4915 0
R4916 0
R4917 0
R4918 0
R4919 0
R4920 0
R4921 0
R4922 0
CR4923 0 save_length = SXWDS(flag_table [flag_count]) ! The flag table.
CR4924 0 + SXWDS(COUNTED_LIST [max_tabs]) ! The TAB table
CR4925 0 + SXWDS(atable_definition) ! The Action TABLE
CR4926 0 + SXWDS(VECTOR [pdt_size]) ! paragraph definition tables
CR4927 0 + saveSk_length, ! SAVE block
R4928 0
CR4929 0 % save_length = (flag_count * 2) ! Each flag uses Two fullwords
CR4930 0 + max_tabs+2 ! maximum tabs plus two control words
CR4931 0 + CH$ALLOCATION(atable_length)! Each Action TABLE entry is one byte
CR4932 0 + pdt_size ! paragraph definition tables
CR4933 0 + SXWDS($save_block), ! SAVE block
R4929 0 )
R4930 0
R4931 0
R4932 0
R4933 1
UR4934 1 %IF DSRPLUS %THEN
UR4935 1
UR4936 1
R4937 0
R4938 0
CR4939 0 % Alternate definitions:
CR4940 0 + max_levels+2 ! for HLLIST
CR4941 0 + (xp_string_size/ZUPVAL)+4 ! for XPD_APPEND
R4942 0 )%
```

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

15-Sep-1984 23:07:40  
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742  
\$255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1

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(2)

: 4943 0 REQUIRE 'REQ:SAVSTK.REQ': ! Save and Restore stack

R4944 0

Version: 'V04-000'

R4945 0

\*\*\*\*\*  
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R4952 0

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R4959 0

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R4963 0

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R4966 0

\*

R4968 0

\*

R4969 0

\*

R4970 0

\*

R4971 0

++

FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

R4973 0

R4974 0

ABSTRACT:

Defines the storage area for the .SAVE commands.

R4976 0

ENVIRONMENT: Transportable BLISS

R4978 0

AUTHOR: Ken Alden

R4980 0

CREATION DATE: December 1982

R4982 0

MODIFIED BY:

R4984 0

002 KAD00002 Keith Dawson 07-Mar-1983  
Global edit of all modules. Updated module names, idents,  
copyright dates. Changed require files to BLISS library.

R4986 0

R4987 0

R4988 0

R4989 0

R4990 0

R4991 0

--

LITERAL

stksav\_size = 30. ! We store up to 30 .SAVEs to record trans.  
savstk\_size = 20. ! Up to 20 levels of .SAVEs  
savstk\_depth = -1. ! Index into the SAVSTK where the current depth is saved.  
savstk\_address = 0. ! Index to starting address of the save block.  
savstk\_source = 1. ! The handler\_code of the command that made this entry.  
savstk\_req\_d = 2. ! REQUIRE depth at which .IF must terminate  
savstk\_ipagen = 3. ! Input file page number  
savstk\_fseqn = 4. ! Input file sequence number.  
savstk\_fspecp = 5. ! A reference to the file spec where the command occurred.

R4992 0

R4993 0

R4994 0

R4995 0

R4996 0

R4997 0

R4998 0

R4999 0

R5000 0

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

L 11  
15-Sep-1984 23:07:40  
15-Sep-1984 22:54:27

VAX-11 Bliss-32 V4.0-742  
S255\$DUA28:[RUNOFF.SRC]SAVSTK.REQ;1 Page 176 (1)

R5001 0 savstk\_fspec = 6; ! Length of file spec of above.  
R5002 0  
R5003 0 LITERAL  
R5004 0 savstk\_item\_count = 7; !Number of pieces of info in SAVSTK.  
R5005 0  
R5006 0 STRUCTURE  
R5007 0 savstack [i,j;n=stksav\_size,m=savstk\_item\_count] =  
R5008 0 [XUPVAL\*( m+n + 1 + 8 )] ? Leave room for the 0th nesting level.  
R5009 2 (savstack + (IF j EQL savstk\_depth  
R5010 2 THEN 0  
R5011 0 ELSE XUPVAL\*(1 + m+i + j) ) );  
R5012 0  
R5013 0 ! End of SAVSTK.REQ

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

: 5014 0 REQUIRE 'REQ:SCA.REQ':

: SCA\_... Scanner and translator control items

M 11  
15-Sep-1984 23:07:40 VAX-11 Bliss-32 v4.0-742  
15-Sep-1984 22:50:43 \$255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1 Page 177  
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R5015 0  
R5016 0  
R5017 0  
R5018 0  
R5019 0  
R5020 0  
R5021 0  
R5022 0  
R5023 0  
R5024 0  
R5025 0  
R5026 0  
R5027 0  
R5028 0  
R5029 0  
R5030 0  
R5031 0  
R5032 0  
R5033 0  
R5034 0  
R5035 0  
R5036 0  
R5037 0  
R5038 0  
R5039 0  
R5040 0  
R5041 0  
R5042 0  
R5043 0  
R5044 0  
R5045 0  
R5046 0  
R5047 0  
R5048 0  
R5049 0  
R5050 0  
R5051 0  
R5052 0  
R5053 0  
R5054 0  
R5055 0  
R5056 0  
R5057 0  
R5058 0  
R5059 0  
R5060 0  
R5061 0  
R5062 0  
R5063 0  
R5064 0  
R5065 0  
R5066 0  
R5067 0  
R5068 0  
R5069 0  
R5070 0  
R5071 0

Version: 'V04-000'

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++  
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:  
Definitions having to do with SCA (SCANT control area).

ENVIRONMENT: Compatible BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

- |      |           |   |  |
|------|-----------|---|--|
| 016  | REM00016  | Ray Marshall  | 16-November-1983   |
|      |           | Added macros with "f"   | within their names and defining cells  |
|      |           | so they can be loaded by Ken's SAVRES module                            | using macro names instead of numeric offsets.  |
| 015  | REM00015  | Ray Marshall  | 7-November-1983  |
|      |           | Added 12 more cells to the case rules section                           | to support case changing within the DEC multinational character set. This also required renumbering the whole table! |
| 014  | KFA00014  | Ken Alden   | 18-Sep-1983  |
|      |           | For DSRPLUS: added sca_margin_pad.                                      |  |
| 013A | KFA00013A | Ken Alden   | 30-Sep-1983  |
|      |           | Comment changes only; for three items that moved from save to save all. |  |

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

8 12  
15-Sep-1984 23:07:40      VAX-11 Bliss-32 v4.0-742  
15-Sep-1984 22:54:30      \$255\$DUA28:[RUNOFF.SRC]SCA.REQ;1  
Page 179  
(1)

R5072 0  
R5073 0      013 KFA00013 Ken Alden 13-Sep-1983  
R5074 0      For DSRPLUS: Added SCA\_WRD\_PASS to the SCA\_PASS word [35]  
R5075 0      and made SCA\_PASS into a-bit.  
R5076 0  
R5077 0      012 KFA00012 Ken Alden 05-Jul-1983  
R5078 0      added SCA\_FLAGS to the save list.  
R5079 0  
R5080 0      011 KFA00011 Ken Alden 15-Mar-1983  
R5081 0      For DSRPLUS: added SCA[35] SCA PASS for flags passthrough  
R5082 0      For DSR: Extended SAVE & RESTORE capability.  
R5083 0  
R5084 0      010 KAD00010 Keith Dawson 07-Mar-1983  
R5085 0      Global edit of all modules. Updated module names, idents,  
R5086 0      copyright dates. Changed require files to BLISS library.  
R5087 0  
R5088 0      !--

R5089 0	MACRO		
R5090 0	SCA_FC_UT	= SCA[00]%	
R5091 0	SCA_OC_UT	= SCA[01]%	Save case rules here when exceptions are set up.
R5092 0	SCA_FC_LT	= SCA[02]%	...
R5093 0	SCA_OC_LT	= SCA[03]%	...
R5094 0	SCA_WRD_FC_UT	= SCA[04]%	Case rules for current word.
R5095 0	SCA_WRD_FC_LT	= SCA[05]%	...
R5096 0	SCA_WRD_OC_UT	= SCA[06]%	...
R5097 0	SCA_WRD_OC_LT	= SCA[07]%	...
R5098 0	SCA_FCB_E_UT	= SCA[08]%	Default case rules.
R5099 0	SCA_OCB_E_UT	= SCA[09]%	...
R5100 0	SCA_FCB_E_LT	= SCA[10]%	...
R5101 0	SCA_OCB_E_LT	= SCA[11]%	...
R5102 0	SCA_MNFC_UT	= SCA[12]%	Save case rules here when exceptions are set up.
R5103 0	SCA_MNOC_UT	= SCA[13]%	...
R5104 0	SCA_MNFC_LT	= SCA[14]%	...
R5105 0	SCA_MNOC_LT	= SCA[15]%	...
R5106 0	SCA_MNW RD_FC_UT	= SCA[16]%	Case rules for current word.
R5107 0	SCA_MNW RD_FC_LT	= SCA[17]%	...
R5108 0	SCA_MNW RD_OC_UT	= SCA[18]%	...
R5109 0	SCA_MNW RD_OC_LT	= SCA[19]%	...
R5110 0	SCA_MNF_CBE_UT	= SCA[20]%	Default case rules.
R5111 0	SCA_MNO_CBE_UT	= SCA[21]%	...
R5112 0	SCA_MNF_CBE_LT	= SCA[22]%	...
R5113 0	SCA_MNO_CBE_LT	= SCA[23]%	...
R5114 0	SCA_WORD_SET	= SCA[24]%	TRUE if case rules set for a word only.
R5115 0	*****		
R5116 0	!Everything above this point is counted in SCA_CASE_SIZE.		
R5117 0			
R5118 0	SCA_JUSTIFY	= .SCA[25]%	!(SAVE)TRUE if text should be justified.
R5119 0	SCA_f JUSTIFY	= SCA[25]%	
R5120 0	SCA_FILL	= .SCA[26]%	!(SAVE)TRUE if filling lines.
R5121 0	SCA_f FILL	= SCA[26]%	
R5122 0	SCA_CC_OK	= .SCA[27]%	!(SAVE ALL)TRUE if control characters allowed in input file
R5123 0	SCA_f CC_OK	= SCA[27]%	
R5124 0	SCA_CROCR	= .SCA[28]%	!(SAVE)See FJNFNJ for explanation.
R5125 0	SCA_f CROCK	= SCA[28]%	
R5126 0	SCA_LM	= .SCA[29]%	!(SAVE)The left margin.
R5127 0	SCA_f LM	= SCA[29]%	
R5128 0	SCA_RM	= .SCA[30]%	!(SAVE)The right margin.
R5129 0	SCA_f RM	= SCA[30]%	
R5130 0	SCA_SPACING	= .SCA[31]%	!(SAVE)1+number of blank lines between lines of text.
R5131 0	SCA_f SPACING	= SCA[31]%	
R5132 0	SCA_PERIOD	= .SCA[32]%	!(SAVE ALL)TRUE if double spacing after ".?!:;"
R5133 0	SCA_f PERIOD	= SCA[32]%	
R5134 0	SCA_KER	= .SCA[33]%	!(SAVE)TRUE if empty records have significance.
R5135 0	SCA_f KER	= SCA[33]%	
R5136 0	SCA_BAR_CHAR	= .SCA[34]%	!(SAVE ALL)Change bar character to be used if enabled.
R5137 0	SCA_f BÄR_CHAR	= SCA[34]%	
R5138 0	SCA_AUTOTITLE	= .SCA[35]%	!(SAVE)TRUE if .AUTOTITLE is in effect.
R5139 0	SCA_f AUTOTITLE	= SCA[35]%	
R5140 0	SCA_FLAGS	= .SCA[36]%	!TRUE if flags are enabled.
R5141 0	SCA_f FLAGS	= SCA[36]%	
R5142 0	***** end of save area *****		
R5143 0	SCA_FC	= SCA[37]%	!TRUE if first character on the line.
R5144 0			
R5145 0			

```

R5146 0   SCA_NBITS      = SCA[39]%,    !SEE BELOW
R5147 0   SCA_X_FLAG     = SCA[39]%,    TRUE if in the middle of a sequence
R5148 0   SCA_FRC_CASE   = SCA[40]%,    marked by the <INDEX flag>
R5149 0   SCA_CONT       = SCA[41]%,    TRUE if case of current
R5150 0   SCA_D0_NBITS   = SCA[42]%,    word was forced.
R5151 0   SCA_PRESCAN   = SCA[43]%,    TRUE if user said .NO SPACE
R5152 0   SCA_HEADER     = SCA[44]%,    SEE BELOW
R5153 0   SCA_SECT_EMPTY = SCA[45]%,    See SCANT for explanation
R5154 0   SCA_XROUTINE   = SCA[46]%,    Used by FLIP -- True if
R5155 0   SCA_XROUTINE   = SCA[46]%,    collecting a header level.
R5156 0   SCA_XROUTINE   = SCA[46]%,    TRUE if nothing in current section.
R5157 0   SCA_XROUTINE   = SCA[46]%,    Indicates which routine to call for indexing:
R5158 0   SCA_XROUTINE   = SCA[46]%,    !FALSE ==> XR, TRUE ==> SUBXR.

UR5159 0   %IF DSRPLUS XTHEN
UR5160 0   SCA_PASS       = (SCA[47])<0,1>%,
UR5161 0   SCA_WRD_PASS   = (SCA[47])<1,1>%,
UR5162 0   SCA_MARGIN_PAD = (SCA[47])<8,8>%, !TRUE user is passing escape
UR5163 0   SCA_MARGIN_PAD = (SCA[47])<8,8>%, !sequences.
UR5164 0   SCA_MARGIN_PAD = (SCA[47])<8,8>%, !TRUE user is passing escape
UR5165 0   SCA_MARGIN_PAD = (SCA[47])<8,8>%, !sequences along with this word.
UR5166 0   SCA_MARGIN_PAD = (SCA[47])<8,8>%, !Number of spaces added at the
UR5167 0   SCA_MARGIN_PAD = (SCA[47])<8,8>%, !beginning of MRA.

!   ...
R5168 0   SCA_WRD_NBITS   = SCA[48]%,    !SEE BELOW
R5169 0   SCA_WRD_CNBITS   = SCA[49]%,    !SEE BELOW
R5170 0   SCA_WRD_ACNBITS  = SCA[50]%,    !SEE BELOW
R5171 0   SCA_RSKIPS      = SCA[51]%,    TRUE if multiple spaces/tabs are to
R5172 0   SCA_RSKIPS      = SCA[51]%,    be skipped.

!   ...
R5174 0   SCA_FC_CASE     = SCA[52]%,    TRUE if case rules to be used are
R5175 0   SCA_INDEX       = SCA[53]%,    those for the first character of a word.
R5176 0   SCA_FRC_CHR     = SCA[54]%,    TRUE if indexing commands are to be obeyed.
R5177 0   SCA_INDENT      = SCA[55]%,    True if current character should not be translated.
R5178 0   SCA_PARA_PND    = SCA[56]%,    Pending indentation.
R5179 0   SCA_PARA_PND    = SCA[56]%,    TRUE if a paragraph is pending.

R5180 0   ...
R5181 0   ...
R5182 0   ...
R5183 0   ...
R5184 0   ...
R5185 0   SCA_WRD_PNTR     = SCA[62]%,    !A CHSPTR to the first character of the word.
R5186 0   SCA_WRD_INT_L    = SCA[63]%,    Internal representation size so far.
R5187 0   SCA_WRD_EXT_L    = SCA[64]%,    External size (i.e., print positions)
R5188 0   SCA_WRD_ISEQN    = SCA[65]%,    Input line counter or record number.
R5189 0   SCA_WRD_DRAFT    = SCA[66]%,    TRUE if word is inside a /DRAFT area.
R5190 0   SCA_WRD_DRAFT_F   = SCA[67]%,    The draft flag for this word.
R5191 0   SCA_WRD_BARS     = (SCA[68])<BAR->%, !TRUE if change bars associated with this word.
R5192 0   SCA_WRD_BAR_CHR   = SCA[69]%,    Use this character as the change bar.
R5193 0   SCA_WRD_CPERD    = SCA[70]%,    Character being worked on.
R5194 0   SCA_WRD_SEQN_F   = SCA[71]%,    TRUE if SCA_WRD_ISEQN is an SOS style record number.
R5195 0   SCA_WRD_IPAGEN   = SCA[72]%,    Input page number.
R5196 0   SCA_WRD_FOOTW   = SCA[73]%,    The number of footnotes attached to
R5197 0   SCA_WRD_F_XTN    = SCA[74]%,    this word.
R5198 0   SCA_WRD_L_XTN    = SCA[75]%,    First transaction number associated with this word.
R5199 0   SCA_WRD_L_XTN    = SCA[75]%,    Last transaction number associated with this word.

!   ...
R5200 0   SCA_WRD_LST_HYP = SCA[80]%,    !TRUE if word to end with a '-'.
R5201 0   SCA_WRD_HYP_PTR = SCA[81]%,    !If SCA_WRD_LST_HYP is TRUE,
R5202 0

```

```

R5203 0
R5204 0
R5205 0
R5206 0
R5207 0
R5208 0
R5209 0
R5210 0
R5211 0
R5212 0
R5213 0
R5214 0
R5215 0
R5216 0
R5217 0
R5218 0
R5219 0
R5220 0
R5221 0
R5222 0
R5223 0
MACRO
R5224 0
R5225 0
R5226 0
R5227 0
R5228 0
R5229 0
R5230 0
R5231 0
R5232 0
R5233 0
R5234 0
R5235 0
R5236 0
R5237 0
R5238 0
R5239 0
R5240 0
R5241 0
R5242 0
R5243 0
R5244 0
R5245 0
R5246 0
R5247 0
R5248 0
MACRO
R5249 0
R5250 0
R5251 0
R5252 0
R5253 0
R5254 0
R5255 0
R5256 0
R5257 0
R5258 0
R5259 0

SCA_WRD_LC_PNCT = SCA[82]%, !then a CHSPTR to the '-'.
SCA_WRD_LST_SP = SCA[83]%, !TRUE if last character was end-of-sentence punctuation.
SCA_WRD_LST_JUS = SCA[84]%, !Number of spaces after last word.
SCA_WRD_LST_UND = SCA[85]%; !True if justification mark after last word.
!True if last space was underlined.

LITERAL SCA_CASE_SIZE = 25; !Number of cells containing case information
LITERAL SCA_SIZE = 96; !Number of cells in entire SCA
LITERAL SCA_SAVE_START = 25; !Starting number of the SAYEd SCA bits
SCA_SAVE_END = 36; !Ending

!NOTE**** For all fields having to do with underlining, bolding, etc, see ENDCHR, ENDWRD, OUTLIN, and DOFLG
! to see how these fields get manipulated.

!The bits defined by these macros get set to TRUE if SCANT is supposed
! to BOLD and/or UNDERline all characters it encounters. These bits get
! set/unset by things like ^& and \&, and .ENABLE/.DISABLE BOLDING, etc.

SCA_BLD = (SCA_NBITS)<BLD-->%, ! Bolding and underlining
SCA_UND = (SCA_NBITS)<UND-->%, ! as a set.
SCA_BLDUND = (SCA_NBITS)<BLDUND-->%;

!The bits defined by these macros determine whether or not various flags
!have any effect. TRUE means that the corresponding function should be
!done when the flag is recognized, FALSE not.
!These bits get set/cleared by commands such as .ENABLE/.DISABLE BOLDING,
!and so on. See FLGSEM, which sets these flags.
!There is a difference between SCA XXX and SCA DO XXX. The former
!indicates whether or not the XXX type of emphasis has been turned on
!by a construct such as ^&. The latter indicates whether or not the
!emphasis called for by XXX should really be done. In particular,
!consider the following sequence:
!00100 .ENABLE UNDERLINING;^&
!00200 This text will be underlined because both .ENABLE UNDERLINING and _^_&
!00300 were specified. But
!00400 .DISABLE UNDERLINING;this text (after the ":";) will not be underlined
!00500 because the .DISABLE UNDERLINING command indicates it should not be
!00600 done. Or, perhaps more interesting is the fact that even
!00700 Bt&h&e&b&e Bt&w&o Bt&b&r&d&s will not be underlined whereas
!00800 .ENABLE UNDERLINING;these two words\& will be underlined, but nothing
!00900 after the _\& sequence.

!See FLGSEM

SCA_DO_BLD = (SCA_DO_NBITS)<BLD-->%, !Bolding and underlining as a set.
SCA_DO_UND = (SCA_DO_NBITS)<UND-->%, !Bold and underline as a set.
SCA_DO_BLDUND = (SCA_DO_NBITS)<BLDUND-->%; !Bold and underline as a set.
SCA_DO_OVR = (SCA_DO_NBITS)<OVR-->%; !Overline as a set.
SCA_DO_IND = (SCA_DO_NBITS)<IND-->%; !Invert as a set.
SCA_DO_HYP = (SCA_DO_NBITS)<HYP-->%; !Hyphen as a set.

MACRO
! The fields defined here are accumulated for an entire word.
! They get cleared at the start of a new word.

```

R5260 0  
R5261 0  
R5262 0  
R5263 0  
R5264 0  
R5265 0  
R5266 0  
R5267 0  
R5268 0  
R5269 0  
R5270 0  
R5271 0  
R5272 0  
R5273 0  
R5274 0  
R5275 0  
R5276 0  
R5277 0  
R5278 0  
R5279 0  
R5280 0  
R5281 0  
R5282 0  
R5283 0  
R5284 0  
R5285 0  
R5286 0  
MR5287 0  
R5288 0  
R5289 0  
R5290 0  
R5291 0  
R5292 0  
R5293 0  
R5294 0  
R5295 0  
R5296 0  
R5297 0  
R5298 0  
R5299 0  
R5300 0  
R5301 0  
R5302 0  
R5303 0  
R5304 0  
R5305 0  
R5306 0  
R5307 0  
R5308 0  
R5309 0  
R5310 0  
R5311 0  
MR5312 0  
R5313 0  
R5314 0  
R5315 0  
MR5316 0

SCA\_WRD\_BLD = (SCA\_WRD\_NBITS)<BLD\_\_>%;  
SCA\_WRD\_UND = (SCA\_WRD\_NBITS)<UND\_\_>%;  
SCA\_WRD\_BLDUND = (SCA\_WRD\_NBITS)<BLDUND\_\_>%; !Bolding and underlining as a set  
SCA\_WRD\_OVR = (SCA\_WRD\_NBITS)<OVR\_\_>%;

## MACRO

The fields defined here get set just before a new character  
is picked up. They are inherited from the global environment  
in effect at that time.

SCA\_WRD\_C\_BLD = (SCA\_WRD\_NBITS)<BLD\_\_>%;  
SCA\_WRD\_C\_UND = (SCA\_WRD\_NBITS)<UND\_\_>%;  
SCA\_WRD\_C\_BLDUND = (SCA\_WRD\_NBITS)<BLDUND\_\_>%; !Bolding and underlining as a set  
SCA\_WRD\_C\_OVR = (SCA\_WRD\_NBITS)<OVR\_\_>%;

## MACRO

The fields defined here get set as various functions are  
requested, on a once-only basis (e.g., single character underline, &x). These fields, together with  
the previous three fields, determine what functions have been  
requested for a specific character.

SCA\_WRD\_AC\_BLD = (SCA\_WRD\_ACNBITS)<BLD\_\_>%;  
SCA\_WRD\_AC\_UND = (SCA\_WRD\_ACNBITS)<UND\_\_>%;  
SCA\_WRD\_AC\_BLUND = (SCA\_WRD\_ACNBITS)<BLDUND\_\_>%; !Bolding and underlining as a set  
SCA\_WRD\_AC\_OVR = (SCA\_WRD\_ACNBITS)<OVR\_\_>%;

## MACRO

SCA\_DEFINITION =  
VECTOR[SCA\_SIZE];

SFIELD H\_R\_SCA\_FIELDS =

SET  
H\_R\_SG\_SCA\_JUSTIFY = [\$INTEGER],  
H\_R\_SG\_SCA\_FILL = [\$INTEGER],  
H\_R\_SG\_SCA\_CC\_OK = [\$INTEGER],  
H\_R\_SG\_SCA\_CROCK = [\$INTEGER],  
H\_R\_SG\_SCA\_LM = [\$INTEGER],  
H\_R\_SG\_SCA\_RM = [\$INTEGER],  
H\_R\_SG\_SCA\_SPACING = [\$INTEGER],  
H\_R\_SG\_SCA\_PERIOD = [\$INTEGER],  
H\_R\_SG\_SCA\_KER = [\$INTEGER],  
H\_R\_SG\_SCA\_BAR\_CHAR = [\$INTEGER],  
H\_R\_SG\_SCA\_AUTOTITLE = [\$INTEGER],  
H\_R\_SG\_SCA\_FLAGS = [\$INTEGER]  
TES;

## LITERAL

H\_R\_SCASK\_LENGTH = SFIELD\_SET\_SIZE;

## LITERAL

MAX\_H\_R\_SCA = 3; !This means there are a maximum of 3 concurrent PUSH\_SCAs.

## MACRO

\$H\_R\_SCA\_BLOCK =  
BLOCK [H\_R\_SCASK\_LENGTH] FIELD (H\_R\_SCA\_FIELDS) %;

## MACRO

PUSH\_SCA =

```

MR5317 0
MR5318 0
MR5319 0
MR5320 0
MR5321 0
MR5322 0
MR5323 0
MR5324 0
MR5325 0
MR5326 0
MR5327 0
MR5328 0
MR5329 0
MR5330 0
R5331 0
R5332 0
R5333 0
MR5334 0
MR5335 0
MR5336 0
MR5337 0
MR5338 0
MR5339 0
MR5340 0
MR5341 0
MR5342 0
MR5343 0
MR5344 0
MR5345 0
MR5346 0
MR5347 0
MR5348 0
R5349 0

BEGIN
PP-SCA [ H_R_SG_SCA_JUSTIFY ] = .SCA_JUSTIFY;
PP-SCA [ R_R_SG_SCA_FILL ] = .SCA_FILL;
PP-SCA [ H_R_SG_SCA_CC_OK ] = .SCA_CC_OK;
PP-SCA [ H_R_SG_SCA_CROCK ] = .SCA_CROCK;
PP-SCA [ H_R_SG_SCA_LM ] = .SCA_LM;
PP-SCA [ H_R_SG_SCA_RM ] = .SCA_RM;
PP-SCA [ H_R_SG_SCA_SPACING ] = .SCA_SPACING;
PP-SCA [ H_R_SG_SCA_PERIOD ] = .SCA_PERIOD;
PP-SCA [ H_R_SG_SCA_KER ] = .SCA_KER;
PP-SCA [ H_R_SG_SCA_BAR_CHAR ] = .SCA_BAR_CHAR;
PP-SCA [ H_R_SG_SCA_AUTOTITLE ] = .SCA_AUTOTITLE;
PP-SCA [ H_R_SG_SCA_FLAGS ] = .SCA_FLAGS
END
%;

MACRO
POP_SCA =
BEGIN
SCA_JUSTIFY = .PP_SCA [ H_R_SG_SCA_JUSTIFY ];
SCA_FILL = .PP_SCA [ H_R_SG_SCA_FILL ];
SCA_CC_OK = .PP_SCA [ H_R_SG_SCA_CC_OK ];
SCA_CROCK = .PP_SCA [ H_R_SG_SCA_CROCK ];
SCA_LM = .PP_SCA [ H_R_SG_SCA_LM ];
SCA_RM = .PP_SCA [ H_R_SG_SCA_RM ];
SCA_SPACING = .PP_SCA [ H_R_SG_SCA_SPACING ];
SCA_PERIOD = .PP_SCA [ H_R_SG_SCA_PERIOD ];
SCA_KER = .PP_SCA [ H_R_SG_SCA_KER ];
SCA_BAR_CHAR = .PP_SCA [ H_R_SG_SCA_BAR_CHAR ];
SCA_AUTOTITLE = .PP_SCA [ H_R_SG_SCA_AUTOTITLE ];
SCA_FLAGS = .PP_SCA [ H_R_SG_SCA_FLAGS ]
END
%;
```

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

H 12

15-Sep-1984 23:07:40  
15-Sep-1984 22:50:43

VAX-11 Bliss-32 V4.0-742  
\$255\$DUA28:[RUNOFF.SRC]DSRL19.REQ;1

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(2)

: 5350 0 REQUIRE 'REQ:SETCAS.REQ'; ! Case control literals

R5351 0 | Version: "V04-000"  
R5352 0 |  
R5353 0 |  
R5354 0 |  
R5355 0 |  
R5356 0 | \* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY  
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R5373 0 |  
R5374 0 |  
R5375 0 |  
R5376 0 |  
R5377 0 |  
R5378 0 |  
R5379 0 | \*++ FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
R5380 0 |  
R5381 0 | ABSTRACT:  
R5382 0 | Mnemonics for forcing letters into appropriate case.  
R5383 0 |  
R5384 0 | ENVIRONMENT: Transportable BLISS  
R5385 0 |  
R5386 0 | AUTHOR: Rich Friday  
R5387 0 |  
R5388 0 | CREATION DATE: 1978  
R5389 0 |  
R5390 0 | MODIFIED BY:  
R5391 0 |  
R5392 0 | 002 KAD00002 Keith Dawson 07-Mar-1983  
R5393 0 | Global edit of all modules. Updated module names, idents,  
R5394 0 | copyright dates. Changed require files to BLISS library.  
R5395 0 |  
R5396 0 |  
R5397 0 |--  
R5398 0 | LITERAL  
R5399 0 | force\_lower = -1. !Force letters to lower case.  
R5400 0 | leave\_case = 0. !Leave letters in same case as input.  
R5401 0 | force\_upper = 1. !Force letters to upper case.  
R5402 0 | first\_caps = 2. !First letter of each word to upper case, the rest to  
R5403 0 | case implied by UPPER/.LOWER CASE.  
R5404 0 | one\_cap = 3; !First letter of first word to upper case, the rest to lower.  
R5405 0 |  
R5406 0 | LITERAL  
R5407 0 | setcase\_low = -1. !Lowest numbered translation rule.

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

112  
15-Sep-1984 23:07:40  
15-Sep-1984 22:54:33

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\$255\$DUA28:[RUNOFF.SRC]SETCAS.REQ;1

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R5408 0      setcase\_high=      3;      !Highest numbered translation rule.  
R5409 0      !  
R5410 0      End of SETCAS.REQ

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

K 12

12-Sep-1984 23:07:40  
15-Sep-1984 22:50:43

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\_S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1

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: 5411 0 REQUIRE 'REQ:TOCRTY.REQ'; ! TOC record type definitions (MAJ\_ & MIN\_)

R5412 0  
R5413 0 Version: 'V04-000'  
R5414 0  
R5415 0 \*\*\*\*\*  
R5416 0 \*  
R5417 0 \* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY  
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R5434 0 \*  
R5435 0 \*  
R5436 0 \* \*\*\*\*\*  
R5437 0  
R5438 0  
R5439 0 ++  
R5440 0 FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
R5441 0  
R5442 0 ABSTRACT:  
R5443 0 Literals defining the record types found in a .BTC or .BRN file. Each  
R5444 0 record is preceded by two words, containing the major record type  
R5445 0 and the minor record type.  
R5446 0  
R5447 0 ENVIRONMENT: Transportable BLISS  
R5448 0  
R5449 0 AUTHOR: Keith Dawson  
R5450 0  
R5451 0 CREATION DATE: May 1982  
R5452 0  
R5453 0 MODIFIED BY:  
R5454 0  
R5455 0 007 KAD00007 Keith Dawson 07-Mar-1983  
R5456 0 Global edit of all modules. Updated module names, idents,  
R5457 0 copyright dates. Changed require files to BLISS library.  
R5458 0  
R5459 0  
R5460 0  
R5461 0 LITERAL Major record types.  
R5462 0 ma\_new\_toc = 1. !New TOC starting (at start of each file)  
R5463 0 ma\_runoff = 2. !Record is something automatically output by DSR  
R5464 0 ma\_send = 3. !Record is something specified by .SEND TOC  
R5465 0 ma\_send\_contents = 4; !Record is something specified by .SEND CONTENTS  
R5466 0  
R5467 0 !The following minor record types apply when the major record type is MAJ\_RUNOFF.  
R5468 0

R5469 0 LITERAL  
R5470 0 min\_hl\_inf = 0; !Header level information  
R5471 0 min\_page = 1; !Page number  
R5472 0 min\_hl\_txt = 2; !Header level text, numbered  
R5473 0 min\_chapt = 3; !Chapter title (BfC files only)  
R5474 0 min\_append = 4; !Appendix title (BTC files only)  
R5475 0 min\_index = 5; !Start the index.  
R5476 0 !  
R5477 0 ! min\_hl\_txt\_u = 6; !Header level text, unnumbered  
R5478 0 !  
R5479 0 ! min\_examp\_inf = 7; !Example information  
R5480 0 min\_examp\_txt = 8; !Example caption text, numbered  
R5481 0 min\_examp\_txt\_u = 9; !Example caption text, unnumbered  
R5482 0 !  
R5483 0 ! min\_figur\_inf = 10; !Figure information  
R5484 0 min\_figur\_txt = 11; !Figure caption text, numbered  
R5485 0 min\_figur\_txt\_u = 12; !Figure caption text, unnumbered  
R5486 0 !  
R5487 0 ! min\_table\_inf = 13; !Table information  
R5488 0 min\_table\_txt = 14; !Table caption text, numbered  
R5489 0 min\_table\_txt\_u = 15; !Table caption text, unnumbered  
R5490 0 !  
R5491 0 ! min\_chapt\_inf = 16; !Chapter information  
R5492 0 min\_chapt\_txt = 17; !Chapter caption text, numbered  
R5493 0 min\_chapt\_txt\_u = 18; !Chapter caption text, unnumbered  
R5494 0 !  
R5495 0 ! min\_append\_inf = 19; !Appendix information  
R5496 0 min\_append\_txt = 20; !Appendix caption text, numbered  
R5497 0 min\_append\_txt\_u = 21; !Appendix caption text, unnumbered  
R5498 0 !  
R5499 0 LITERAL  
R5500 0 min\_min\_type = 0; !The minimum minor record type.  
R5501 0 min\_max\_type = 21; !The maximum minor record type.  
R5502 0 !  
R5503 0 ! SEND CONTENTS record group literals.  
R5504 0 !  
R5505 0 LITERAL  
R5507 0 scon\_comm = 1; !Send Contents text is a command  
R5508 0 scon\_txt = 2; !Send Contents text is text, numbered  
R5509 0 scon\_txt\_u = 3; !Send Contents text is text, unnumbered  
R5510 0 !  
R5511 0 !  
R5512 0 ! SEND CONTENTS positioning information.  
R5513 0 !  
R5514 0 LITERAL  
R5515 0 scon\_lev = 1; !Put Send Contents in main part of CONTENTS  
R5516 0 scon\_exa = 2; !Put Send Contents in Examples portion  
R5517 0 scon\_fig = 3; !Put Send Contents in Figures portion  
R5518 0 scon\_tab = 4; !Put Send Contents in Tables portion  
R5519 0 !  
R5520 0 ! End of TOCRTY.REQ

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

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15-Sep-1984 23:07:40  
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\_S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1

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5521 0  
U 5522 0    XIF DSRPLUS %THEN  
U 5523 0    REQUIRE 'REQ:TNFDEFS.REQ';    ! TN... opcodes and status values for TNFIL  
U 5524 0    REQUIRE 'REQ:TNRREC.REQ';    ! TNRREC... items (for topnote record headers)  
U 5525 0    REQUIRE 'REQ:TOPNOT.REQ';    ! Topnote control table  
5526 0    %FI  
5527 0  
5528 0    REQUIRE 'REQ:TPROB.REQ';    ! Completion codes returned by TPROBE routine

R5529 0  
R5530 0  
R5531 0  
R5532 0  
R5533 0  
R5534 0  
R5535 0  
R5536 0  
R5537 0  
R5538 0  
R5539 0  
R5540 0  
R5541 0  
R5542 0  
R5543 0  
R5544 0  
R5545 0  
R5546 0  
R5547 0  
R5548 0  
R5549 0  
R5550 0  
R5551 0  
R5552 0  
R5553 0  
R5554 0  
R5555 0  
R5556 0  
R5557 0  
R5558 0  
R5559 0  
R5560 0  
R5561 0  
R5562 0  
R5563 0  
R5564 0  
R5565 0  
R5566 0  
R5567 0  
R5568 0  
R5569 0  
R5570 0  
R5571 0  
R5572 0  
R5573 0  
R5574 0  
R5575 0  
R5576 0  
R5577 0  
R5578 0  
R5579 0  
R5580 0  
R5581 0  
R5582 0

Version: 'V04-000'  
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\*\*\*\*\*  
\*+  
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
ABSTRACT:  
Condition codes returned by the routine TPROBE in its binary search.  
ENVIRONMENT: Transportable BLISS  
AUTHOR: Rich Friday  
CREATION DATE: 1978  
MODIFIED BY:  
002 KAD00002 Keith Dawson 07-Mar-1983  
Global edit of all modules. Updated module names, idents,  
copyright dates. Changed require files to BLISS library.  
--  
LITERAL  
give\_up = 0; ! Keyword cannot possibly be in list.  
found = 1; ! This entry is the one you want.  
try\_above = 2; ! Keyword has to be above this entry.  
try\_below = 3; ! Keyword has to be below this entry.  
End of TPROB.REQ

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

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VAX-11 Bliss-32 V4.0-742  
S255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1

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: 5583 0 REQUIRE 'REQ:TSF.REQ'; ! TSF\_ (Text so far) macro definitions

THE

R5584 0  
R5585 0      Version: 'V04-000'  
R5586 0  
R5587 0  
R5588 0  
R5589 0      \*\*\*\*\*  
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R5607 0  
R5608 0  
R5609 0  
R5610 0  
R5611 0      ++  
R5612 0      FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS  
R5613 0  
R5614 0      ABSTRACT:  
R5615 0      Definitions defining TSF (text so far). The information describes  
R5616 0      what is to happen to the line being built up.  
R5617 0  
R5618 0      ENVIRONMENT: Transportable BLISS  
R5619 0  
R5620 0      AUTHOR: Rich Friday  
R5621 0  
R5622 0      CREATION DATE: 1978

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

E 13  
12-Sep-1984 23:07:40  
15-Sep-1984 22:54:43

VAX-11 Bliss-32 V4.0-742  
\$255\$DUA28:[RUNOFF.SRC]TSF.REQ;1

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R5623 0  
R5624 0  
R5625 0  
R5626 0  
R5627 0  
R5628 0  
R5629 0  
R5630 0  
R5631 0  
R5632 0  
R5633 0  
R5634 0  
R5635 0  
R5636 0

MODIFIED BY:

007 KFA00007 Ken Alden 30-Jun-1983  
Added TSF\_CREF\_COUNT.  
006 REM00006 Ray Marshall 1-June-1983  
Added TSF\_CREF\_DATA.  
005 KAD00005 Keith Dawson 07-Mar-1983  
Global edit of all modules. Updated module names, idents,  
copyright dates. Changed require files to BLISS library.  
!--

EL

R5637 0  
MR5638 0  
R5639 0  
MR5640 0  
R5641 0  
MR5642 0  
R5643 0  
MR5644 0  
R5645 0  
MR5646 0  
R5647 0  
MR5648 0  
R5649 0  
MR5650 0  
R5651 0  
MR5652 0  
R5653 0  
MR5654 0  
R5655 0  
MR5656 0  
R5657 0  
MR5658 0  
R5659 0  
MR5660 0  
R5661 0  
MR5662 0  
R5663 0  
MR5664 0  
R5665 0  
MR5666 0  
R5667 0  
MR5668 0  
R5669 0  
MR5670 0  
R5671 0  
MR5672 0  
R5673 0  
MR5674 0  
R5675 0  
MR5676 0  
R5677 0  
MR5678 0  
R5679 0  
MR5680 0  
R5681 0  
MR5682 0  
R5683 0  
MR5684 0  
R5685 0  
MR5686 0  
R5687 0  
MR5688 0  
MR5689 0  
R5690 0  
MR5691 0  
R5692 0  
MR5693 0

MACRO

tsf\_int\_hl = tsf [0] !Number of characters, internal representation.  
tsf\_ext\_hl = tsf [1] !Resulting number of print positions, external.  
tsf\_nb\_bits = tsf [2] !Notes about underlining, etc.  
tsf\_footw = tsf [3] !The number of footnotes attached to this line.  
tsf\_seqn\_flag = tsf [4] !TRUE if ISEQN is an SOS style line number.  
tsf\_index = tsf [5] !TRUE if this belongs in the index.  
tsf\_int\_vl = tsf [6] !Number of characters representing carriage control.  
tsf\_bar\_char = tsf [7] !The character to be used as the change bar.  
tsf\_jus\_cnt = tsf [8] !Number of justification marks.  
tsf\_justify = tsf [9] !True if the line is to be justified.  
tsf\_adjust = tsf [10] !Move text this number of positions right.  
tsf\_btc = tsf [11] !TRUE if this goes to the .BTC file.  
tsf\_draft\_flag = tsf [12] !The draft flag for this line.  
tsf\_lines = tsf [13] !If this record is part of a footnote, the number of lines it generates.  
tsf\_first\_xtn = tsf [14] !First transaction number associated with this text.  
tsf\_major = tsf [14] !If TSF\_BTC is true, the major record type.  
tsf\_last\_xtn = tsf [15] !Last transaction number associated with this text.  
tsf\_minor = tsf [15] !If TSF\_BTC is true, the minor record type.  
tsf\_padding = tsf [16] !Number of spaces needed to justify line.  
tsf\_iseq = tsf [17] !TRUE if the input sequence number is wanted.  
tsf\_iseqn = tsf [18] !The input sequence number for this line.  
tsf\_ipagen = tsf [19] !The input page number for this line.  
tsf\_filespec = tsf [20] !A CHSPTR to the file-spec.  
tsf\_oseq = tsf [21] !TRUE if the output sequence number is wanted.  
tsf\_oseqn = tsf [22] !The output line number for this line  
tsf\_bold\_depth = tsf [23] !Number of times bolded characters should be overstruck. Zero is equivalent to no bolding.  
tsf\_text = tsf [24] !True, if TSF contains some text.  
tsf\_just\_alg = tsf [25] !Justification algorithm to be used on this line.

R5694 0  
R5695 0  
R5696 0  
MR5697 0  
R5698 0  
MR5699 0  
R5700 0  
R5701 0  
R5702 0  
R5703 0  
R5704 0  
MR5705 0  
R5706 0  
MR5707 0  
R5708 0  
MR5709 0  
R5710 0  
MR5711 0  
R5712 0  
MR5713 0  
R5714 0  
R5715 0  
R5716 0  
R5717 0  
R5718 0  
R5719 0  
R5720 0  
R5721 0  
MR5722 0  
R5723 0  
R5724 0  
MR5725 0  
R5726 0  
R5727 0  
MR5728 0  
R5729 0  
R5730 0  
R5731 0  
MR5732 0  
R5733 0  
R5734 0  
R5735 0  
MR5736 0  
R5737 0  
R5738 0  
: R5739 0

%.  
tsf\_xyplus = tsf [26] !True if this line is an XPLUS/YPLUS indexing command.  
%.  
tsf\_cref\_data = tsf [27] ! Pointer to linked list of CREF BRN records.  
%.  
tsf\_cref\_count = (tsf [28])<0,8> !Number of pending crefs.  
!! tsf\_free\_cell = tsf [29] !Free cell  
!! tsf\_free\_cell = tsf [30] !Free cell  
%.  
tsf\_aux\_bits = tsf [31] !Do specified special functions.  
%.  
tsf\_h\_bars = (tsf [32])<BAR\_\_> !TRUE if change bars apply to the items described by TSF\_xxx\_HL.  
%.  
tsf\_aux\_aloc = tsf [33] !How TSF\_AUX\_SPAC is allocated.  
%.  
tsf\_next\_reg = tsf [34] !Indicates next free "pseudo-register."  
%.  
tsf\_phregs = tsf [35] !Five "pseudo-registers".  
:  
LITERAL  
tsf\_nregs = 5; !Number of "pseudo-registers" available.  
:  
LITERAL  
tsf\_size = 40; !Total size of TSF.  
:  
MACRO  
tsf\_bld = (TSF\_NBITS)<BLD\_\_>  
%.  
tsf\_und = (TSF\_NBITS)<UND\_\_>  
%.  
tsf\_ovr = (TSF\_NBITS)<OVR\_\_>  
:  
MACRO  
tsf\_bars = (TSF\_AUX\_BITS)<BAR\_\_> !True if change bars apply to the items described by TSF\_xxx\_VL.  
%.  
MACRO  
tsf\_definition =  
REF VECTOR [tsf\_size];  
:  
End of TSF.REQ

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

: 5740 0

REQUIRE 'REQ:VR.REQ':

: VR\_... & VR\*\_DEF for .VR and conditionals

H 13

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15-Sep-1984 22:50:43

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\_S255\$DUALd:[RUNOFF.SRC]DSRLIB.REQ;1

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EL  
VC

R5741 0  
R5742 0  
R5743 0  
R5744 0  
R5745 0  
R5746 0  
R5747 0  
R5748 0  
R5749 0  
R5750 0  
R5751 0  
R5752 0  
R5753 0  
R5754 0  
R5755 0  
R5756 0  
R5757 0  
R5758 0  
R5759 0  
R5760 0  
R5761 0  
R5762 0  
R5763 0  
R5764 0  
R5765 0  
R5766 0  
R5767 0  
R5768 0  
R5769 0  
R5770 0  
R5771 0  
R5772 0  
R5773 0  
R5774 0  
R5775 0  
R5776 0  
R5777 0  
R5778 0  
R5779 0  
R5780 0  
R5781 0  
R5782 0  
R5783 0  
R5784 0  
R5785 0  
R5786 0  
R5787 0  
R5788 0  
R5789 0  
R5790 0  
R5791 0  
R5792 0  
R5793 0  
R5794 0  
R5795 0  
R5796 1  
R5797 0

Version: 'V04-000'

\*\*\*\*\*  
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++  
FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS

ABSTRACT:

Tables and definitions used for .VARIABLE, .IF, .IFNOT, .ELSE, and  
.ENDIF. The tables all contain space for an extra entry, so that various  
other pieces of code need not continually check to see if there is an  
entry in the tables.

ENVIRONMENT: Transportable BLISS

AUTHOR: Rich Friday

CREATION DATE: 1978

MODIFIED BY:

002 KAD00002 Keith Dawson 07-Mar-1983  
Global edit of all modules. Updated module names, idents,  
copyright dates. Changed require files to BLISS library.

--  
LITERAL

vr\_table\_count = 5. !Number of tables that are vectors.

vr\_tab\_size = !Total BPVALs needed to save this information.  
!Space for tables that are vectors.  
(max\_vr\_names + 1) \* (vr\_table\_count)  
+

```
R5798 0          !Space for names.  
R5799 0          (max_vr_names + 1) * CH$ALLOCATION (max_vr_length);  
R5800 0  
R5801 0  
MACRO  
MR5802 0          vrtflg_def =  
MR5803 0          VECTOR [max_vr_names + 1]      ! TRUE flag.  
R5804 0          %,  
R5805 0  
MR5806 0  
MR5807 0          vrfflg_def =  
R5808 0          VECTOR [max_vr_names + 1]      ! FALSE flags.  
R5809 0          %,  
MR5810 0          vrbool_def =  
MR5811 0          VECTOR [max_vr_names + 1]      ! TRUE/FALSE setting.  
R5812 0          %,  
R5813 0  
MR5814 0  
MR5815 0          vrsrc_def =  
R5816 0          VECTOR [max_vr_names + 1]      ! How variable got defined.  
R5817 0          %,  
MR5818 0          ! 0 means /VARIANT, 1 means .VARIABLE.  
MR5819 0          vrlnq_def =  
R5820 0          VECTOR [max_vr_names + 1]      ! Lengths of variable names.  
R5821 0          %,  
MR5822 0          vrname_def =  
MR5823 0          BLOCKVECTOR [max_vr_names + 1]  
MR5824 0          ,ch$allocation (max_vr_length)]  
R5825 0  
R5826 0  
R5827 0          %:  
                  ! End of VR.REQ
```

FLIPRECS -- FLIP/RUNOFF record formats  
TOCHL -- HL indicator record

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\$\_\$255\$DUA28:[RUNOFF.SRC]DSRLIB.REQ;1

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: 5828 0 !! REQUIRE 'REQ:XTNTAB.REQ'; ! In-core index table & entry definitions  
: 5829 0 ! End of DSRLIB.REQ

#### Library Statistics

File	Total	Symbols Loaded	Symbols Percent	Pages Mapped	Processing Time
\$_\$255\$DUA28:[SYSLIB]XPORT.L32;1	590	41	6	252	00:00.2
\$_\$255\$DUA28:[RUNOFF.SRC]RNODEFDSR.L32;1	6	1	16	5	00:00.1

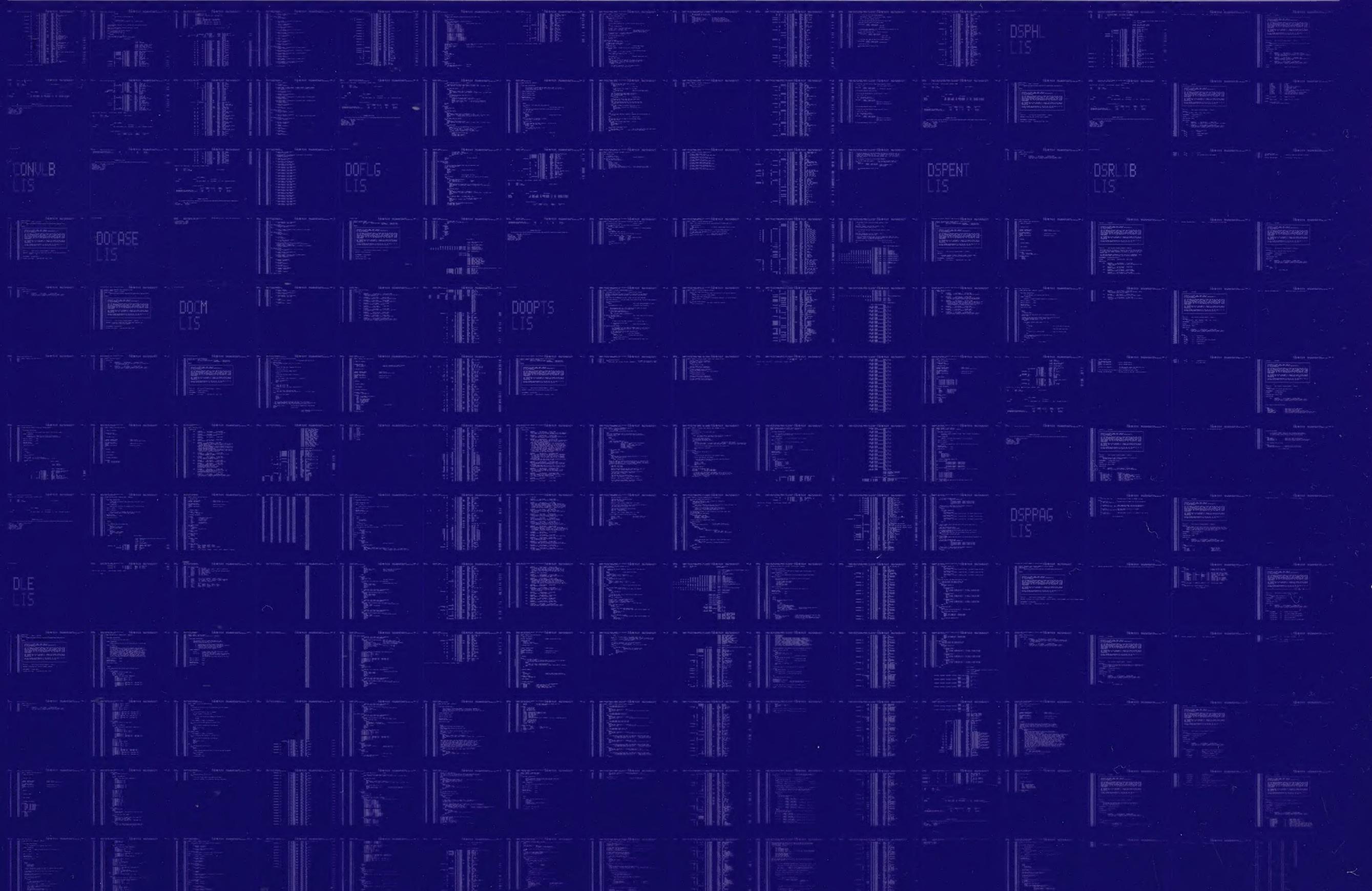
#### COMMAND QUALIFIERS

: BLISS/LIBRARY=SRC\$:/LIST=LIS\$: SRC\$:DSRLIB.REQ

: Run Time: 01:17.4  
: Elapsed Time: 01:46.7  
: Lines/CPU Min: 4520  
: Lexemes/CPU-Min: 67306  
: Memory Used: 284 pages  
: Library Precompilation Complete

0339 AH-BT13A-SE  
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